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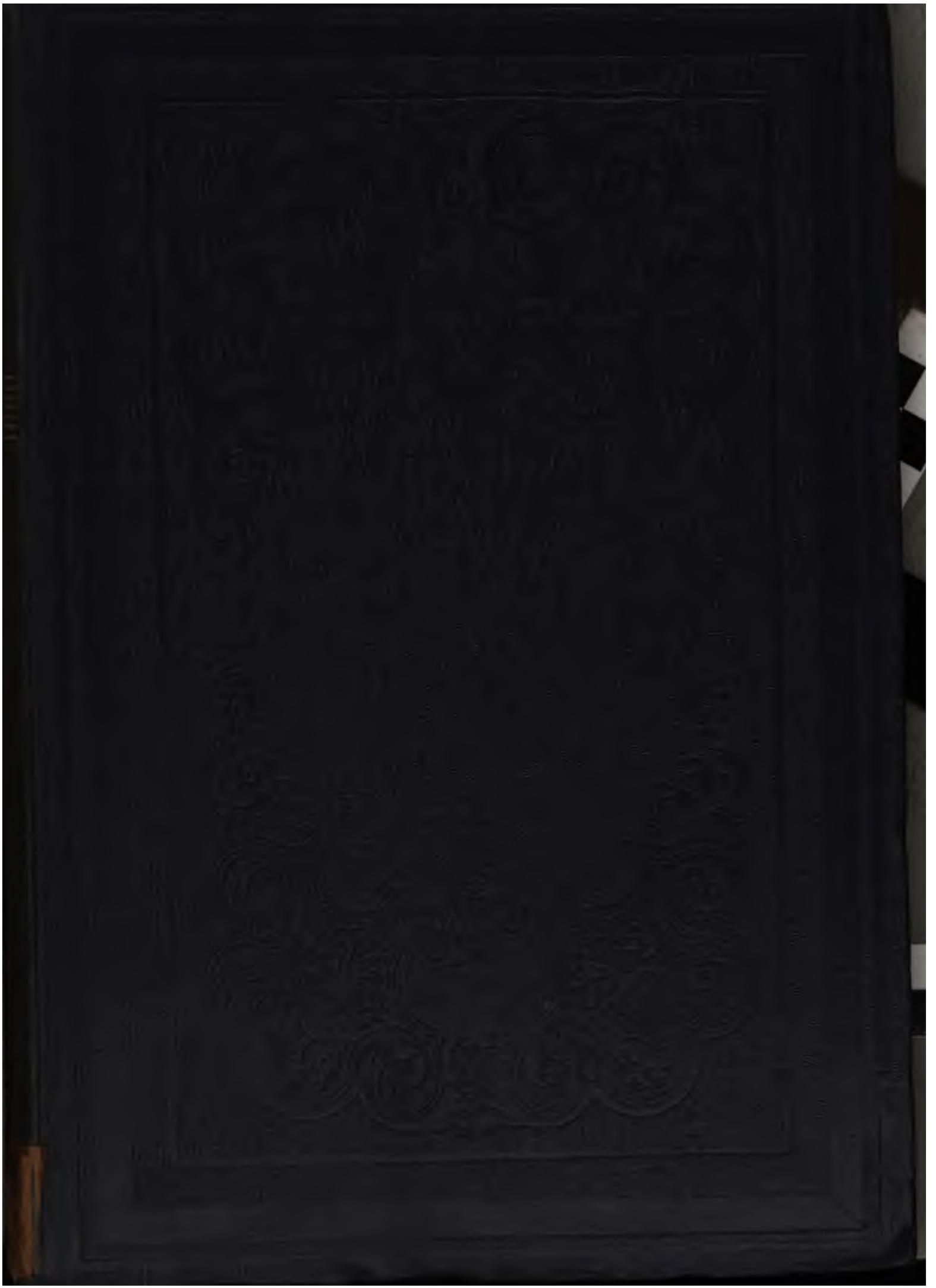

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15 & 16 VICTORIÆ, Cap. 83. Sec. XXXII.

CHRONOLOGICAL INDEX

OF

PATENTS APPLIED FOR AND PATENTS GRANTED

For the Year 1860.

Printed and Published by Order of the Commissioners of Patents,

UNDER THE

ACT of 15 & 16 VICTORIÆ, Cap. 83. Sec. XXXII.

BY BENNET WOODCROFT,

SUPERINTENDENT OF SPECIFICATIONS, INDEXES, &c.

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SOUTHAMPTON BUILDINGS, HOLBORN.

1861.

CHRONOLOGICAL INDEX

OF

PATENTS APPLIED FOR AND PATENTS GRANTED.

Luis. 2nd January 1860.	1. Jozé Luis, of the British and Foreign Office for Patents, No. 1B, Welbeck Street, Cavendish Square, London, in the County of Middlesex, Patent Agent, for an invention for—"An improved brick making machine."—*A communication from abroad by Joseph Tenaud, of Paris, in the Empire of France.* *Provisional protection only.*
Luis. 2nd January 1860.	2. Jozé Luis, of the British and Foreign Office for Patents, No. 1B, Welbeck Street, Cavendish Square, in the County of Middlesex, Patent Agent, for an invention for—"An improved safety lock."—*A communication from abroad by Lasserre & Sarthon, of Paris, in the Empire of France.* *Letters Patent sealed.*
Simons. 2nd January 1860.	3. William Simons, of Glasgow, in the County of Lanark, North Britain, Ship-builder, for an invention for—"Improvements in the construction of ships or other floating vessels." *Letters Patent sealed.*
Dewar. 2nd January 1860.	4. Henry Andrew Dewar, of Union Street, Aberdeen, North Britain, M.D., for an invention for—"Improvements in moulding or applying india-rubber as the basis of artificial teeth, and in apparatus for the same." *Letters Patent sealed.*
Jackson. 2nd January 1860.	5. William Jackson, of Worsley, in the County of Lancaster, Mechanic, for an invention for—"Improvements in coupling apparatus for hoists for the prevention of over winding." *Provisional protection only.*
Prince. 2nd January 1860.	6. Alexander Prince, of the Office for Patents, 4, Trafalgar Square, in the County of Middlesex, for an invention for—"Improvements in the construction of piano fortes."—*A communication from abroad by Dr. Hürliman, of the firm of Wädensweiler and Company, Pianoforte Makers, resident at Zurich, in Switzerland.* *Letters Patent sealed.*
Rowbotham. Gratton. 2nd January 1860.	7. Samuel Rowbotham, of Putney, in the County of Surrey, Doctor of Medicine, and Thomas Gratton, of Derby, in the County of Derby, for an invention for—"A composition for rendering un-inflammable linen, cotton, silk, or other inflammable fabrics and substances." *Letters Patent sealed.*
Hardy. 3rd January 1860.	8. Thomas Hardy, Engineer, of Windmill Street, Wednesbury, in the County of Stafford, for an invention for—"An improved tool for cleaning the inside of the tubes or flues of tubular steam-boilers." *Letters Patent sealed.*
Johnson. 3rd January 1860.	9. John Henry Johnson, of 47, Lincoln's Inn Fields, in the County of Middlesex, and of 166, Buchanan Street, in the City of Glasgow, North Britain, Gentleman, for an invention for—"Improvements in furnaces and fire places for the better combustion of fuel."—*A communication from abroad by Nicholas François Corbin-Desboissières, of Paris, in the Empire of France.* *Letters Patent sealed.*
Horridge. 3rd January 1860.	10. John Horridge, of Birkenhead, in the County of Chester, Gentleman, for an invention for—"An improved iron wheelway for streets and roads." *Letters Patent sealed.*
Ollivier. 3rd January 1860.	11. Louis Bertrand Ollivier, of 29, Boulevart St. Martin, Paris, in the Empire of France, Gentleman, for an invention for—"Improvements in ploughs." *Provisional protection only.*

CHETWYN. 3rd January 1860.

12. EPHRAIM CHETWYN, of Worcester, in the County of Worcester, Glove Maker, for an invention for—" Improvements in the manufacture of gloves." *Provisional protection only.*

HULETT. 3rd January 1860.

13. DAVID HULETT, of 55, and 56, High Holborn, in the County of Middlesex, Gas Engineer, for an invention for—" Improvements in apparatus for measuring gas, and in apparatus for indicating the pressure of gas." *Provisional protection only.*

BATEMAN. BATEMAN. 3rd January 1860.

14. DANIEL BATEMAN, and SAMUEL BATEMAN, both of Low Moor, near Bradford, in the County of York, Card Makers, for an invention for—" Improvements in machinery for the manufacture of cards for carding wool and other fibrous substances." *Letters Patent sealed.*

HUDSON. 3rd January 1860.

15. FREDERIC HUDSON, of 227, Blackfriars Road, in the County of Surrey, Gas Meter Manufacturer, for an invention for—" Improvements in Gas Meters." *Letters Patent sealed.*

NEWTON. 3rd January 1860.

16. ALFRED VINCENT NEWTON, of the Office for Patents, 66, Chancery Lane, in the County of Middlesex, Mechanical Draughtsman, for an invention for—" Improvements in the cut off motion and slide valves of steam engines."—*A communication from abroad by Charles Auguste Schultz and John Hauck, both of New York, in the United States of America.* *Provisional protection only.*

WHEATMAN. 3rd January 1860.

17. JOHN WHEATMAN, of Sheffield, in the County of York, Saw Manufacturer, for an invention for—" Improvements in machinery or apparatus for grinding saws and other similar articles of metal." *Provisional protection only.*

BLACET. 4th January 1860.

18. MATHIEU BLACET, of St. Etienne, Department of the Loire, Empire of France, Ironfounder, for an invention for—" Improvements in miners' safety lamps." *Provisional protection only.*

GRIMALDI. 4th January 1860.

19. PHILIPPE GRIMALDI, of Teramo, in the Kingdom of Naples, now No. 60, Boulevart de Strasbourg, Paris, Physician, for an invention for—" Improved steam generators not liable to bursting." *Provisional protection only.*

KLEIN. ROGER. 4th January 1860.

20. JOSEPH LOUIS EDOUARD KLEIN, and JULES PARFAIT ROGER, of Montmartre, in the Empire of France, for an invention for—" A rotatory vice applicable for the manufacture of shoes and all objects of art or industry generally made by hand." *Provisional protection only.*

DAVIES. 4th January 1860.

21. GEORGE DAVIES, of No. 1, Serle Street, Lincoln's Inn, in the County of Middlesex, and No. 28, St. Enoch Square, in the City of Glasgow, Civil Engineer and Patent Agent, for an invention for—" Improvements applicable to nibs or burners for gas."—*A communication from abroad by Monsieur Legris, of Paris, Mechanical Engineer.* *Letters Patent sealed.*

THOMAS. 4th January 1860.

22. EDMUND THOMAS, of Saint Mellons, in the County of Monmouth, Cordwainer, for an invention for—" A self-acting water guage for steam-boilers with a regulator for the feed." *Provisional protection only.*

MENNONS. 4th January 1860.

23. MARC ANTOINE FRANÇOIS MENNONS, of the British and Foreign Patent Offices, 39, Rue de l'Echiquier, Paris, in the Empire of France, for an invention for—" An improved fertilizing compound for agricultural purposes."—*A communication from Messrs. Charles de Chauveau and Celeste Duval, of Oran, in the Colony of Algeria.* *Letters Patent sealed.*

MENNONS. 4th January 1860.

24. MARC ANTOINE FRANÇOIS MENNONS, of the British and Foreign Patent Offices, 39, Rue de l'Echiquier, Paris, in the Empire of France, for an invention for—" Certain improvements in the production of motive-power, and in the apparatus connected therewith."—*A communication from Louis Diodor Läserson, of Moscow, in the Empire of Russia, presently resident at Paris.* *Letters Patent sealed.*

WALLS. 4th January 1860.

25. JOSEPH WALLS, of Farington Mills, near Preston, in the County of Lancaster, Engineer, for an invention for—" Improved arrangements of compound steam-engines." *Letters Patent sealed.*

WORSLEY. 4th January 1860.

26. PHILIP JOHN WORSLEY, of Rotherhithe, in the County of Surrey, for an invention for—" Improvements in the separation of silver and lead." *Letters Patent sealed.*

GAMMON. 4th January 1860.

27. CHARLES GAMMON, of No. 9, Cloak Lane, in the City of London, Solicitor, for an invention for—" An improved churn." *Provisional protection only.*

HORWOOD.
5th January 1860.

28. ALBERT HORWOOD, of Great Quebec Street, in the County of Middlesex, Electrician, for an invention for—"Improvements in signalling by electricity, and in apparatus connected therewith, adapted to communicating between railway stations and railway trains, and also applicable to other purposes."
Provisional protection only.

DE ST. JUST.
5th January 1860.

29. LOUIS ARMAND LE BLANC DE ST. JUST, of the British and Foreign Office for Patents, No. 1B, Welbeck Street, Cavendish Square, in the County of Middlesex, for an invention for—"An improved machine for cutting soft and hard stones in open quarries." *Provisional protection only.*

NEWTON.
5th January 1860.

30. ALFRED VINCENT NEWTON, of the Office for Patents, 66, Chancery Lane, in the County of Middlesex, Mechanical Draughtsman, for an invention for—"An improved mode of and apparatus for fitting the abutting ends of the rails of railways together."—*A communication from abroad by Benjamin A. Mason, of Newport, Rhode Island.* *Letters Patent sealed.*

CHAMBERS.
5th January 1860.

31. AUSTIN CHAMBERS, of Bow, in the County of Middlesex, Engineer, for an invention for—"Improvements in the mode of working junction signals on railways."
Letters Patent sealed.

SAMPLE.
5th January 1860.

32. GEORGE SAMPLE, of Montague Place, Whitechapel, in the County of Middlesex, for an invention for—"Improvements in boots, shoes, clogs, and such like coverings for the feet." *Provisional protection only.*

PERKES.
5th January 1860.

33. SAMUEL PERKES, of Clapham, in the County of Surrey, Civil Engineer, for an invention for—"Improvements in presses and modes of pressing applicable to cotton, hemp, wool, coir, hides, hay, fibres, peat, linen, thread, piece goods, extracting oil, and other useful purposes." *Provisional protection only.*

FISHER.
5th January 1860.

34. JOHN FISHER, of Carrington, in the County of Nottingham, Lace Manufacturer, for an invention for—"Improvements in machinery or apparatus for washing, cleansing, or purifying clothes and other articles." *Letters Patent sealed.*

PROCTER.
WALKER.
5th January 1860.

35. THOMAS PROCTER, and THOMAS WALKER, both of Derby, in the County of Derby, Manufacturers, for an invention for—"Improvements in sewing-machines."
Provisional protection only.

ROBINSON.
5th January 1860.

36. RICHARD ALEXANDER ROBINSON, of 25, Cannon Street, E.C., for an invention for—"Improvements in sugar mills." *Letters Patent sealed.*

GÖSSELL.
5th January 1860.

37. OTTO JOHN THEODORE GÖSSELL, of Moorgate Street, in the City of London, Merchant, for an invention for—"Improvements in the construction of locomotive engines."—*A communication from abroad by Louis Stössger, of Breslau, in the Kingdom of Prussia.* *Letters Patent sealed.*

DE TIVOLI.
HUDSON.
6th January 1860.

38. VITAL DE TIVOLI, of 67, Lower Thames Street, County of Middlesex, London, and Colonel JOSEPH HUDSON, of No. 13, Victoria Street, London, for an invention for—"A swimming and floating apparatus." *Provisional protection only.*

KNOWLES.
6th January 1860.

39. JOHN KNOWLES, of Lower Broughton, near Manchester, in the County of Lancaster, Machinist, for an invention for—"Certain improvements in looms for weaving." *Letters Patent sealed.*

HILL.
6th January 1860.

40. HENRY CHEETHAM HILL, of Stalybridge, in the County of Chester, Manager, for an invention for—"Certain improvements in or applicable to machines for carding cotton, flax, wool, and other fibrous materials." *Provisional protection only.*

VIDEGRAIN.
6th January 1860.

41. RÉNÉ CHARLES VIDEGRAIN, Merchant, residing Laffitte Street, No. 10, in the Empire of France, for an invention for—"Improvements in the manufacture of artificial marbles." *Letters Patent sealed.*

MOY.
6th January 1860.

42. THOMAS MOY, of No. 1, Clifford's Inn, in the County of Middlesex, Mechanical Engineer and Naval Architect, for an invention for—"Improvements in steam-engine governors." *Letters Patent sealed.*

FOWLER.
6th January 1860.

43. JOHN FOWLER, of Waterford, Ireland, Gentleman, for an invention for—"Improvements in locks for doors and other purposes."—*A communication from abroad by Warren Rowell, of New York, in the United States of America, Dentist.*
Letters Patent sealed.

PERRIER. 6th January 1860.

44. LOUIS FELIX PERRIER, of Marseille, in the French Empire, Joiner, for an invention for—"Improvements in machinery for making wax-matches and wood-matches." *Letters Patent sealed.*

VIVIAN. 6th January 1860.

45. ROGER VIVIAN, of Tuckingmill, in the County of Cornwall, Engineer and Founder, for an invention for—"Improvements in constructing balls for cricket and other games, which invention is also applicable to spherical valves." *Provisional protection only.*

HARLAND. 6th January 1860.

46. EDWARD JAMES HARLAND, Iron Ship Builder and Engineer, Belfast, for an invention for—"Improvements in constructing and covering the decks of ships and other floating bodies." *Letters Patent sealed.*

HOOPER. 6th January 1860.

47. WILLIAM HOOPER, of Mitcham, in the County of Surrey, India-rubber Manufacturer, for an invention for—"Improvements in reworking compounds of india-rubber and sulphur, and in insulating telegraphic wires or conductors." *Provisional protection only.*

BELLAMY. 7th January 1860.

48. THOMAS BELLAMY, of Birmingham, in the County of Warwick, Wire Worker, for an invention for—"An improvement or improvements in the manufacture of wire lattice work." *Letters Patent sealed.*

BOULTON. 7th January 1860.

49. JAMES BOWYER D'ARCEY BOULTON, of Usk, in the County of Monmouth, Civil Engineer, for an invention for—"Improvements in slide valves." *Letters Patent sealed.*

HAWKINS. HAWKINS. 7th January 1860.

50. JOHN HAWKINS, of Lysle Street, London, in the County of Middlesex, and of Walsall, in the County of Stafford, Bit, Spur, and Stirrup Manufacturer, and CHARLES HAWKINS, of Walsall, aforesaid, Manager of the Works of the said John Hawkins, for an invention for—"An improved apparatus for the use of railway guards and passengers, for the purpose of communicating with the engine drivers of railway trains when necessary." *Letters Patent sealed.*

BAYLISS. 7th January 1860.

51. BENJAMIN BAYLISS, of Aston Park, near Birmingham, in the County of Warwick, Gun and Pistol Manufacturer, for an invention for—"Improvements in breech-loading fire-arms applicable for military and sporting purposes." *Letters Patent sealed.*

GARNETT. 7th January 1860.

52. JOHN GARNETT, of Windermere, in the County of Westmorland, Printer and Stationer, for an invention for—"Improvements in writing-desks and in apparatus connected therewith." *Letters Patent sealed.*

MORELAND. 7th January 1860.

53. RICHARD MORELAND, Junior, of 5, Old Street, E.C., for an invention for—"Improvements in condensing apparatus to be used with high-pressure steam-engines." *Provisional protection only.*

CHANCE. HOWELL. 7th January 1860.

54. HENRY CHANCE, of Birmingham, in the County of Warwick, Glass Manufacturer, and THOMAS HOWELL, of Smethwick, in the County of Stafford, Glass-house Manager, for an invention for—"Improvements in the manufacture of glass." *Letters Patent sealed.*

WILSON. 7th January 1860.

55. JOSEPH WILLIAM WILSON, of 9, Buckingham Street, Strand, in the County of Middlesex, for an invention for—"Improvements in apparatus for cleaning guns." *Letters Patent sealed.*

HILLEL. 9th January 1860.

56. JULES FERDINAND HILLEL, at the British and Foreign Office for Patents, No. 1B, Welbeck Street, Cavendish Square, in the County of Middlesex, for an invention for—"An improved machine for squatting, separating, and tearing rushes and all other textile fibrous plants." *Letters Patent sealed.*

BENINGFIELD. 9th January 1860.

57. GEORGE BENINGFIELD, of Clark Street, Stepney, in the County of Middlesex, Agent, for an invention for—"Improvements in reservoir or fountain pens." *Letters Patent sealed.*

CZUGAJEWICZ. 9th January 1860.

58. PIERRE CZUGAJEWICZ, of Paris, in the French Empire, Professor, for an invention for—"Certain improvements in stereoscopes." *Letters Patent sealed.*

MATHERS. 9th January 1860.

59. ROBERT MATHERS, of 287, Oxford Street, in the County of Middlesex, Engineer, for an invention for—"Improvements in the manufacture of wheels and axles." *Letters Patent sealed and specification filed by order.*

COFFEY.
9th January 1860.

60. JOHN AMBROSE COFFEY, of Providence Row, Finsbury, in the County of Middlesex, Engineer, for an invention for—"Improvements in obtaining and applying motive-power by means of ponderous bodies." *Letters Patent sealed.*

THORNTHWAITE.
10th January 1860.

61. WILLIAM HENRY THORNTHWAITE, of Newgate Street, in the City of London, Optician, for an invention for—"Improvements in the treatment and reduction of ores, and in the manufacture of iron and steel, and in the construction and mode of working the furnaces employed in such said manufactures." *Letters Patent sealed.*

MORRISON.
KINSEY.
10th January 1860.

62. WILLIAM HENRY MORRISON, of Nottingham, Manufacturer, and HENRY KINSEY, of the same place, Engineer, for an invention for—"Improvements in means or apparatus employed in the manufacture of bonnet and cap fronts, rouches, and other articles of millinery, parts of which improvements are also applicable in the treatment of lace for other purposes." *Provisional protection only.*

ISAAC.
10th January 1860.

63. SAMUEL ISAAC, of the firm of Isaac, Campbell, and Company, of Saint James' Street, in the County of Middlesex, for an invention for—"Improvements in over-coats particularly adapted to military purposes." *Letters Patent sealed.*

VERGNES.
10th January 1860.

64. MAURICE VERGNES, of the City and State of New York, in the United States of America, for an invention for—"Improvements in galvanic batteries." *Letters Patent sealed.*

DICKSON.
10th January 1860.

65. JOHN FARMERLEY DICKSON, of No. 6, Russell Street, Litchurch, near Derby, in the County of Derby, Civil Engineer, for an invention for—"Improvements in the construction of sewing-machines together with the apparatus connected therewith." *Provisional protection only.*

HENRY.
10th January 1860.

66. WILLIAM ARTHUR HENRY, of Sheffield, in the County of York, Engineer, for an invention for—"Improvements in machinery or apparatus for the manufacture of screws." *Provisional protection only.*

ALLDAY.
10th January 1860.

67. WILLIAM THOMAS BISSELL ALLDAY, of Rednall, in the County of Worcester, Farmer, for an invention for—"Certain improved apparatus for separating filings or other small bits or particles of iron or steel from other metallic filings, scrapings, chippings, or other small particles or dust." *Letters Patent sealed.*

BOLTON.
BOLTON.
11th January 1860.

68. ALFRED SOHIER BOLTON, of Oakamoor, in the County of Stafford, Manufacturer, and FRANCIS SEDDON BOLTON, of Birmingham, in the County of Warwick, Manufacturer, for an invention for—"An improvement or improvements in the manufacture of hollow cylinders of copper or alloys of copper, which said cylinders may be used for rollers for printing fabrics and for such other purposes as the same are or may be applicable to." *Letters Patent sealed; no specification filed.*

JOHNSON.
11th January 1860.

69. CECIL JOHNSON, of No. 6, Northumberland Street, Strand, in the County of Middlesex, for an invention for—"Making a shoe without the use of leather." *Provisional protection only.*

COTTON.
11th January 1860.

70. WILLIAM COTTON, of Loughborough, in the County of Leicester, Manufacturer, for an invention for—"Improvements in machinery or apparatus employed in the manufacture of looped fabrics." *Letters Patent sealed.*

STRAUSS.
11th January 1860.

71. ADOLPH STRAUSS, of Spitalfields, in the County of Middlesex, Merchant, for an invention for—"An improvement in pipes for smoking." *Letters Patent sealed.*

JAMESON.
11th January 1860.

72. JOHN JAMESON, of 10, Catherine Terrace, Gateshead, for an invention for—"Improvements in compressing and expanding æriform fluids." *Letters Patent sealed.*

BROWNLIE.
11th January 1860.

73. ARCHIBALD BROWNLIE, of Glasgow, in the County of Lanark, North Britain, Merchant, for an invention for—"Improvements in the treatment of sewerage matters and in the apparatus employed therein." *Provisional protection only.*

REID.
11th January 1860.

74. ANDREW REID, of the City of Londonderry, in the County of Ulster, Ireland, Shirt Cutter, for an invention for—"Improvements in shirts." *Provisional protection only.*

NEWTON.
11th January 1860.

75. WILLIAM EDWARD NEWTON, of the Office for Patents, 66, Chancery Lane, in the County of Middlesex, Civil Engineer, for an invention for—"Improved apparatus for transmitting signals."—*A communication from abroad by Mark Runkel, of New York, in the United States of America.* *Provisional protection only.*

GRIMSHAW. 11th January 1860.

76. O'DONNELL GRIMSHAW, of Belfast, in the Kingdom of Ireland, Postmaster for an invention for—"Improved apparatus for registering the number of impressions given to documents or other articles by hand stamps and stamping or printing presses." *Letters Patent sealed.*

NEWTON. 11th January 1860.

77. WILLIAM EDWARD NEWTON, of the Office of Patents, 66, Chancery Lane, in the County of Middlesex, Civil Engineer, for an invention for—"Improved apparatus for moulding candles."—*A communication from abroad by Henry Ryder and Horatio Leonard, both of New Medford, County of Middlesex, and State of Massachusetts, in the United States of America.* *Letters Patent sealed.*

NEWTON. 11th January 1860.

78. ALFRED VINCENT NEWTON, of the Office for Patents, 66, Chancery Lane, in the County of Middlesex, Mechanical Draughtsman, for an invention for—"An improved construction of lock."—*A communication from abroad by John P. Lord and Richard N. Batchelder, both of Manchester, in the State of New Hampshire, and United States of America.* *Letters Patent sealed.*

BOUTET. 11th January 1860.

79. CHARLES THOMAS BOUTET, Engineer Mechanician, No. 176, Tottenham Court Road, for an invention for—"A new mover applicable to all branches of industry, and designed to replace the steam:—The Aéro-hidraulic-mover." *Provisional protection only.*

WEST. ROBINSON. 12th January 1860.

80. ANDREW WEST, and JOHN ROBINSON, both of Wickham Market, in the County of Suffolk, for an invention for—"Improvements in furnaces and in apparatus to be used therein." *Letters Patent sealed; no specification filed.*

ORCHARD. 12th January 1860.

81. WILLIAM HENRY ORCHARD, of No. 15, Hatton Garden, in the County of Middlesex, Gentleman, for an invention for—"Improvements in dressing millstones for cleaning all kinds of small grain having a husk or hull."—*A communication to him from abroad by Henry Darling, of New York, in the United States of America.* *Provisional protection only.*

DE BERGUE. 12th January 1860.

82. CHARLES DE BERGUE, of Dowgate Hill, in the City of London, Engineer, for an invention for—"Improvements in machinery for rivetting, parts of which are applicable to machines for punching metal." *Letters Patent sealed.*

FERRIER. 12th January 1860.

83. EUGÈNE FERRIER, of 22, Boulevard Montmartre, Paris, in the Empire of France, Clockmaker, for an invention for—"A new clock." *Letters Patent sealed; no specification filed.*

SINNOCK. 12th January 1860.

84. WILLIAM SINNOCK, of Brompton, in the County of Kent, Ropery Engineer, for an invention for—"Improvements in the arrangements of apparatus for the manufacture of hempen or other fibrous covered insulated wires for submarine telegraph cables." *Provisional protection only.*

SINNOCK. 12th January 1860.

85. WILLIAM SINNOCK, of Brompton, in the County of Kent, Ropery Engineer, for an invention for—"An improved apparatus for paying out submarine telegraph cables." *Provisional protection only.*

CARTER. 12th January 1860.

86. GEORGE CARTER, of Water Street, Blackburn, in the County of Lancaster, for an invention for—"Improvements in the means and apparatus for boiling and mixing size, colour, or any other matters or substances requiring such treatment." *Provisional protection only.*

FRANKAU. 12th January 1860.

87. SIDNEY FRANKAU, of Bishopsgate Street, in the City of London, Merchant, for an invention for—"An improvement in pipes for smoking." *Provisional protection only.*

ROBINSON. 12th January 1860.

88. GEORGE ROBINSON, of the Town and County of the Town of Newcastle-upon-Tyne, Doctor of Medicine, for an invention for—"Improvements in the manufacture of carbonate of lead and of chlorine." *Provisional protection only.*

BURLEY. 12th January 1860.

89. ROBERT BURLEY, of Glasgow, in the County of Lanark, North Britain, Hammer-handle Manufacturer, for an invention for—"Improvements in handles for hammers, mallets, picks, and similar tools." *Letters Patent sealed.*

TWENTYMAN. 12th January 1860.

90. ALFRED CHARLES TWENTYMAN, of Wolverhampton, in the County of Stafford, Merchant, for an invention for—"Improvements in machinery to be used in manufacturing spikes, bolts, rivets-screwblanks, and other similar articles."—*A communication from abroad by James H. Shweet, of Pittsburg, Pennsylvania, in the United States of America.* *Letters Patent sealed.*

MOORE.
MOORE.
12th January 1860.

91. PAUL MOORE, and PAUL MOORE the younger, of Birmingham, in the County of Warwick, Manufacturers, for an invention for—"Improvements in the manufacture of the dies or draw plates used in drawing wire and tubes, and for other similar purposes." *Provisional protection only.*

HARRISON.
SCOTT.
13th January 1860.

92. EDWIN HARRISON, and JOSHUA SCOTT, of Oldham, in the County of Lancaster, Gas Meter Manufacturers, for an invention for—"Improvements in gas, meters." *Letters Patent sealed.*

GISBORNE.
13th January 1860.

93. FREDERIC NEWTON GISBORNE, of Sydenham, in the County of Kent, Engineer and Electrician, for an invention for—"Improvements in insulating material for telegraphic purposes." *Provisional protection only.*

MITCHELL.
13th January 1860.

94. AURELIUS BRUCE MITCHELL, of Birmingham, in the County of Warwick, Manufacturer, for an invention for—"An improvement or improvements in ornamenting brass knobs for doors, drawers, cupboards, and for other like purposes." *Letters Patent sealed.*

HAYES.
13th January 1860.

95. JOSEPH HAYES, of the City of Gloucester, Builder and Contractor, for an invention for—"An improved break for common road and railway carriage wheels, applicable also to the wheels of machinery for raising and lowering weights." *Letters Patent sealed.*

GODDARD.
13th January 1860.

96. JOSEPH GODDARD, of Stockport, in the County of Chester, Dyer, for an invention for—"Improvements in the preparation and dyeing of yarns or threads." *Letters Patent sealed.*

MUSSELWHITE.
13th January 1860.

97. JOHN MUSSELWHITE, of Devizes, in the County of Wilts, Accountant, for an invention for—"Improvements in apparatus for transferring fluids." *Letters Patent sealed.*

EUNSON.
13th January 1860.

98. JOHN EUNSON, of Wolverhampton, in the County of Stafford, Engineer, for an invention for—"Improvements in refrigerating apparatus."—*A communication from abroad by Robert Groat Eunson, of the City of New York, in the United States of America.* *Letters Patent sealed.*

KNOWLES.
14th January 1860.

99. WILLIAM KNOWLES, of Bolton-le-Moors, in the County of Lancaster, Cotton Spinner, for an invention for—"Certain improvements in machinery for carding cotton and other fibrous materials." *Provisional protection only.*

MENNONS.
14th January 1860.

100. MARC ANTOINE FRANÇOIS MENNONS, of the British and Foreign Patent Offices, 39, Rue de l'Echiquier, Paris, in the Empire of France, for an invention for—"An improved candle wick."—*A communication from Leopold Autran, residing at Milan, in the Kingdom of Piedmont.* *Letters Patent sealed.*

LANG.
14th January 1860.

101. BENOIT LANG, of the firm of Lang and Company, of No. 67, St. Martin's Lane, in the City of Westminster, India-rubber Manufacturers, for an invention for—"An improved method or apparatus for obtaining a continuous stream of water or other fluid, particularly adapted for pumps and for administering injections, and other such like purposes." *Provisional protection only.*

BARTON.
ROSS.
14th January 1860.

102. WILLIAM BARTON, of Shoreditch, and FREDERICK ROSS, of Clerkenwell, both in the County of Middlesex, for an invention for—"Ornamenting textile fabrics known as American cloth." *Provisional protection only.*

WILSON.
14th January 1860.

103. THOMAS WILSON, of Birmingham, in the County of Warwick, Engineer, for an invention for—"Improvements in breech-loading fire-arms." *Letters Patent sealed.*

DAVIS.
14th January 1860.

104. JOHN DAVIS, of 18, Frith Street, Soho, in the County of Middlesex, Professor of Music, for an invention for—"Improvements in music stands, part of which is also applicable to tents for military and other purposes." *Provisional protection only.*

COFFEY.
14th January 1860.

105. JOHN AMBROSE COFFEY, of Providence Row, Finsbury, in the County of Middlesex, Engineer, for an invention for—"Improvements applicable to or connected with steam-engines and other motive mechanism with the view to economise power." *Provisional protection only.*

SMITH.
14th January 1860.

106. THOMAS JONES SMITH, of Plaistow Marshes, in the County of Essex, Engineer, for an invention for—"An improved machine for printing in more than one color at a time." *Letters Patent sealed.*

SMITH. 14th January 1860.	107. WILLOUGHBY SMITH, of Pownall Road, Dalston, in the County of Middlesex, for an invention for—" Improvements in transferring designs and in ornamenting glass and other surfaces, also in the manufacture of slides for magic lanterns." *Letters Patent sealed.*
DAVID. 14th January 1860.	108. ANTOINE DAVID, of Saint Chamond, in the Empire of France (Loire Dept.), for an invention for—" Improvements in jacquard apparatus."—*A communication from abroad by Ennemond David, of Saint Chamond, France.* *Letters Patent sealed.*
CHATTERTON. SMITH. 14th January 1860.	109. JOHN CHATTERTON, of Highbury Terrace, and WILLOUGHBY SMITH, of Pownall Road, Dalston, both in the County of Middlesex, for an invention for—" Improvements in treating gutta-percha, india-rubber, and compounds of those substances." *Letters Patent sealed.*
ALDRIDGE. 16th January 1860.	110. FREDERICK THOMAS ALDRIDGE, of 37, Great Dover Street, Southwark, for an invention for—" An improved soft waterproof cloth hat." *Provisional protection only.*
RENDEL. 16th January 1860.	111. ALEXANDER MEADOWS RENDEL, of No. 8, Great George Street, in the City and Liberty of Westminster, for an invention for—" Improvements in the construction and arrangement of ships of war." *Letters Patent sealed.*
STENSON. 16th January 1860.	112. JOSEPH STENSON, of the Town of Northampton, in the County of Northampton, Civil Engineer, for an invention for—" Improvements in the manufacture of iron." *Letters Patent sealed.*
COPE. 16th January 1860.	113. WILLIAM SHERRATT COPE, of Hanley, Staffordshire, Mining Engineer, for an invention for—" Improvements in apparatus for preventing accidents at mines." *Provisional protection only.*
GREW. 17th January 1860.	114. NATHANIEL GREW, of No. 47, Parliament Street, Westminster, Civil Engineer, for an invention for—" Improved pressure and vacuum guages for steam, water, gas, or other fluids." *Provisional protection only.*
HUGHES. 17th January 1860.	115. WILLIAM HUGHES, of the City of Manchester, in the County of Lancaster, Engineer, for an invention for—" Improvements in metal ties or fastenings for packing bales of cotton wool or other fibrous substances, which improvements are also applicable to packing bales of manufactured goods."—*A communication from abroad by Charles Hughes, of New Orleans, America.* *Provisional protection only.*
FEARNLEY. 17th January 1860.	116. SAMUEL FEARNLEY, of Rochdale, in the County of Lancaster, Engineer, for an invention for—" Improvements in looms for weaving looped or pile fabrics, some parts of which improvements are applicable to other kinds of looms." *Letters Patent sealed.*
VOGL. 17th January 1860.	117. DAVID VOGL, of the firm of Vogl Brothers, Sambrook Court, Basinghall Street, in the City of London, Merchant, for an invention for—" Improvements in knapsacks, haversacks, and such like portable receptacles." *Provisional protection only.*
BROOMAN. 17th January 1860.	118. RICHARD ARCHIBALD BROOMAN, of 166, Fleet Street, in the City of London, Patent Agent, for an invention for—" Improvements in extracting substances from cereal grains and some of their products, and the application of the substances extracted."—*A communication from abroad by Benjamin Paraf-Javal, of Paris.* *Letters Patent sealed.*
RUCHET. VONWILLER. SEILER. 17th January 1860.	119. DAVID FRANÇOIS LOUIS RUCHET, JACOB VONWILLER, and FREDERICH SEILER, of Paris, in the French Empire, Manufacturers, for an invention for—" An improved rotatory machine to be used as a water-wheel, steam engine, or pump, and for transmitting at any distance motive power." *Letters Patent sealed.*
SPENCER. 17th January 1860.	120. JOHN FREDERICK SPENCER, of Adelaide Place, London Bridge, Consulting Engineer, for an invention for—" Improvements in steam-engines for propelling ships and other vessels and for other purposes." *Letters Patent sealed.*
BURROWS. 17th January 1860.	121. BENJAMIN BURROWS, of Leicester, for an invention for—" Improvements in looms for weaving narrow fabrics." *Letters Patent sealed.*

JOHNSON. 17th January 1860.

122. JOHN HENRY JOHNSON, of 47, Lincoln's Inn Fields, in the County of Middlesex, and of 166, Buchanan Street, in the City of Glasgow, North Britain, Gentleman, for an invention for—"Improvements in the insulation of submarine electric telegraph wires."—*A communication from abroad by John M. Batchelder, of Cambridge, in the State of Massachusetts, United State of America.*

Letters Patent sealed.

DAWES. 17th January 1860.

123. THOMAS GEAST DAWES, of Wolverhampton, in the County of Stafford, Iron Merchant, for an invention for—"A new or improved compressed air and exhaustion hammer." *Letters Patent sealed.*

GOULSON. 17th January 1860.

124. JOB GOULSON, of 37, Ponsonby Place, Vauxhall Bridge Road, Westminster, for an invention for—"Improvements in gas meters." *Letters Patent sealed.*

NORTON. 17th January 1860.

125. CHARLES NORTON, of Saint's Martins Place, Camden Street, Camden Town, in the County of Middlesex, for an invention for—"An improved portable scaffolding adapted for constructing, ornamenting, and repairing buildings, and for the removal of goods and persons therefrom in cases of fire.' *Provisional protection only.*

MEDLOCK. 18th January 1860.

126. HENRY MEDLOCK, of Great Marlborough Street, in the County of Middlesex, Analytical Chemist, for an invention for—"Improvements in the preparation of red and purple dyes." *Letters Patent sealed.*

BARKER. BARKER. 18th January 1860.

127. GEORGE JONES BARKER, and THOMAS BARKER, both of the Chiltington Iron Works, Wolverhampton, in the County of Stafford, for an invention for—"Improvements in machinery or apparatus for manufacturing shoes for horses and other animals."—*A communication from abroad by Henry Burden, of the City of Troy, in the United States of America.* *Letters Patent sealed.*

SMITH. SMITH. 18th January 1860.

128. WILLIAM SMITH, and PRINCE SMITH, both of Keighley, in the County of York, Machine Makers, for an invention for—"An improved process of hardening cast iron caps used in machinery for spinning and doubling wool, cotton, silk, flax, mohair, and other fibrous substances." *Letters Patent sealed.*

CHAPLIN. 18th January 1860.

129. ALEXANDER CHAPLIN, of Glasgow, in the County of Lanark, North Britain, Engineer, for an invention for—"Improvements in engines for drawing or conveying heavy loads." *Letters Patent sealed.*

HEWITSON. WALKER. 18th January 1860.

130. WILLIAM WATSON HEWITSON, & BENJAMIN WALKER, of Leeds, Civil Engineers, for an invention for—"Improvements in steam hammers."

Letters Patent sealed.

ERMEN. PLATT. 18th January 1860.

131. GODFREY ERMEN, of Manchester, in the County of Lancaster, Cotton Spinner, and JOHN PLATT, of Oldham, in the said County, Mechanical Engineer, for an invention for—"Improvements in machinery or apparatus for spinning, winding, and doubling cotton and other fibrous materials."

Letters Patent sealed; no Specification filed.

KREEFT. 18th January 1860.

132. SIEGERICH CHRISTOPHER KREEFT, of Fenchurch Street, in the City of London, Merchant, for an invention for —"Improvements in the permanent way of railways." — *A communication from abroad by Carl Von Etzel, of Vienna, Civil Engineer.* *Provisional protection only.*

BERGER. 18th January 1860.

133. JOHN BARKER BERGER, of Upper John Street, Fitzroy Square, in the County of Middlesex, Master Mariner, for an invention for—"An improved mode of and apparatus for ascertaining the proper course to steer ships or vessels."

Letters Patent sealed.

SCHUBERTH. 18th January 1860.

134. JOHANN SCHUBERTH, of Vienna, in the Austrian Empire, Manufacturer, for an invention for—"Improvements in nails and similar articles, and in preparing materials for the production thereof, and of buttons and various other articles to which the same may be applicable." *Provisional protection only.*

MAILLARD. 18th January 1860.

135. NICHOLAS DORAN MAILLARD, of York Street, Dublin, Ireland, for an Invention for—"Improvements in the means for steering and indicating the course or direction and time of ships and other navigable vessels at sea, which improvements are also applicable to other purposes." *Letters Patent sealed.*

CURTIS.
HAIGH.
19th January 1860.

136. THOMAS CURTIS, and JONATHAN HAIGH, both of Leeds, in the County of York, Cloth Finishers, for an invention for—" Improvements in machinery to be used in finishing cloths or fabrics having nap or pile on their surfaces."
Letters Patent sealed.

BLAIR.
19th January 1860.

137. HARRISON BLAIR, of Kearsley Works, Farnworth, in the County of Lancaster, Manufacturing Chemist, for an invention for—" Improvements in the production of carbonic acid gas." *Letters Patent sealed.*

DAWES.
19th January 1860.

138. WILLIAM DAWES, of Compton, in the County of Stafford, Engineer, for an invention for —" Improvements in the manufacture of metal shoes for beasts of draught and burden, and in the machinery or apparatus to be used in such manufacture." *Letters Patent sealed.*

NEEDHAM.
19th January 1860.

139. JOSEPH NEEDHAM, of Piccadilly, in the County of Middlesex, Gun Maker, for an invention for—" Improvements in the application of the rise and fall of the waves to the propulsion of vessels." *Letters Patent sealed.*

BOWER.
19th January 1860.

140. ANTHONY BOWER, of Liverpool, for an invention for—" Improvements in ship building." *Letters Patent sealed.*

GRIFFITH.
20th January 1860.

141. WILLIAM GRIFFITH, of Hitchin, in the County of Herts, for an invention for —" Improvements in propelling vessels and locomotive carriages."
Provisional protection only.

GRAY.
20th January 1860.

142. THOMAS GRAY, of Carrs Hill Glass Works, Gateshead, in the County of Durham, for an invention for—" Improvements in the manufacture of goblets and other similar articles in glass, and in the apparatus connected therewith."
Provisional protection only.

CLISSOLD.
20th January 1860.

143. WILLIAM CLISSOLD, of Dudbridge, in the County of Gloucester, Engineer, for an invention for—" Improved machinery for grinding vegetable, mineral, and other substances." *Provisional protection only.*

TIMMINS.
20th January 1860.

144. JOHN TIMMINS, of Runcorn, in the County of Chester, Engineer, for an invention for—" Improvements in the construction of safety cages and hoists for raising and lowering weights in mine and other shafts." *Letters Patent sealed.*

MOORE.
MOORE.
20th January 1860.

145. PAUL MOORE, and PAUL MOORE, the younger, of Birmingham, in the County of Warwick, Manufacturers, for an invention for—" Improvements in the manufacture of the dies or draw plates used in drawing wire and tubes, and for other similar purposes."—*Partly a communication from abroad by J. J. Eagleton, of New York, in the United States of America.* *Letters Patent sealed.*

SHAW.
20th January 1860.

146. JOHN SHAW, of Manchester, in the County of Lancaster, Landscape Gardener, for an invention for—" Improvements in the construction of ventilators for hot houses, conservatories, and other such buildings." *Letters Patent sealed.*

COTTAM.
COTTAM.
20th January 1860.

147. GEORGE HALLEN COTTAM, and HENRY RICHARD COTTAM, of St. Pancras Iron Works, Old St. Pancras Road, in the County of Middlesex, for an invention for —" Improvements in the manufacture of chairs, bedsteads, and other articles to sit or recline on." *Letters Patent sealed.*

CALLARD.
20th January 1860.

148. THOMAS CARR CALLARD, of 4, Blenheim Terrace, St. John's Wood, in the County of Middlesex, for an invention for—" Improvements in preparing wheaten flour." *Letters Patent sealed.*

DE LA FERTÉ.
20th January 1860.

149. FERDINAND JEAN JOUBERT DE LA FERTÉ, of 36, Porchester Terrace, in the County of Middlesex, for an invention for—" Improvements in reproducing photographic and other pictures, engravings, prints, devices, and designs on the surfaces of glass, ceramic, and other substances requiring to be fired to fix the same thereon."—*Partly a communication from abroad by Henry Garnier, residing at 71, Rue Notre Dame des Champs, Paris.* *Letters Patent sealed.*

ALLEN.
20th January 1860.

150. THOMAS FREDERICK ALLEN, of 3, Elizabeth Terrace, Hackney Wick, in the County of Middlesex, for an invention for—" Improvements in bait cans for fishing purposes." *Provisional provisional only.*

MEAKIN.
20th January 1860.

151. JOHN FORSTER MEAKIN, of Baker Street, in the County of Middlesex, Upholsterer, for an invention for—" An improvement in envelopes."
Letters Patent sealed.

WALKER. 21st January 1860.

152. HENRY WALKER, of Gresham Street, in the City of London, and of Alcester, in the County of Warwick, Needle Manufacturer, for an invention for—"Improvements in putting up or packing needles and other small articles."
Letters Patent sealed.

LAURENS. 21st January 1860.

153. CHARLES PIERRE PRICE LAURENS, of Rouen, in the Empire of France, Professor of Mathematics, for an invention for—"Improvements in the manufacture of chlorine." *Letters Patent sealed.*

SCOTT. 21st January 1860.

154. JOHN WILLIAM SCOTT, of the City of Worcester, Button Manufacturer, for an invention for—"Improvements in plates for attaching buttons to garments and other articles, in button shanks and in buttons." *Letters Patent sealed.*

BELLEVILLE. 21st January 1860.

155. JULIEN FRANÇOIS BELLEVILLE, of Paris, in the French Empire, Civil Engineer, for an invention for—"Improvements in steam generators."
Letters Patent sealed.

GEDGE. 21st January 1860.

156. WILLIAM EDWARD GEDGE, of the firm of John Gedge and Son, No. 4, Wellington Street South, Strand, in the County of Middlesex, Patent Agent, for an invention for—"Improvements in retorts for the distillation of bituminous schists."—*A communication from abroad by Jacques Antoine Gossot, of Epinac, in the Empire of France, Geometrical Architect.* *Letters Patent sealed.*

GEDGE. 21st January 1860.

157. WILLIAM EDWARD GEDGE, of the firm of John Gedge and Son, No. 4, Wellington Street South, Strand, in the County of Middlesex, Patent Agent, for an invention for—"Improved props for supporting plants."—*A communication from abroad by Lambert Grès, of Haybes, in the Empire of France, Slate Merchant*
Letters Patent sealed.

VIVIER. 21st January 1860.

158. OCTAVE VIVIER, of Birmingham, in the County of Warwick, Watch Maker, for an invention for—"Improvements in keyless watches." *Letters Patent sealed.*

SPEDDING. 21st January 1860.

159. BENJAMIN JOSEPH SPEDDING, of Birkenhead, in the County of Chester, Gentleman, for an invention for—"Improvements in apparatus for generating gas from oily and fatty substances, and in coolers and holders or gasometers."
Provisional protection only.

LANDRIN. SOULÉ. 21st January 1860.

160. HENRI LANDRIN, of 79, Rue de Seine, Engineer, and LOUIS JOSEPH SOULÉ, of 4, Rue de Montholon, Advocate, both of Paris, for an invention for—"Improvements in washing ores and minerals."—*Partly a communication from abroad by Henri Charles Landrin, of No. 79, Rue de Seine, Paris, aforesaid, but now residing in Portugal, Engineer.* *Provisional protection only.*

BEVIS. 21st January 1860.

161. RESTEL RATSEY BEVIS, of Birkenhead, Engineer, for an invention for—"Improvements in marine steam-engines." *Provisional protection only.*

M°DOUGALL. 21st January 1860.

162. ALEXANDER M°DOUGALL, of Manchester, in the County of Lancaster, Manufacturing Chemist, for an invention for—"Improvements in the preparation of materials used for sizing, dressing, or finishing yarns or threads and woven fabrics, applicable also to sizing paper." *Letters Patent sealed.*

DAVID. VERCHER. 21st January 1860.

163. LÉON EMILE DAVID, and JEAN AMÉDÉE VERCHER, of 29, Boulevart St. Martin, Paris, in the Empire of France, Gentlemen, for an invention for—"An improved brake for vehicles." *Provisional protection only.*

FERRY. 23rd January 1860.

164. FRANÇOIS JOSEPH FERRY, of Rupert Street, in the County of Middlesex, Locksmith, for an invention for—"Improvements in harnessing horses or other animals to carriages or vehicles." *Provisional protection only.*

RAE. 23rd January 1860.

165. MARTIN RAE, of the City of Manchester, in the County of Lancaster, Joiner, for an invention for—"Improvements in roughening or obscuring glass globes, tubes, or other vessels." *Letters Patent sealed.*

POTTER. 23rd January 1860.

166. JAMES POTTER, of the City of Manchester, Machinist, for an invention for—"Certain improvements in self-acting mules." *Letters Patent sealed.*

ANDERSON. 23rd January 1860.

167. MURRAY ANDERSON, of Tollington Park, Hornsey Road, in the County of Middlesex, Surveyor, for an invention for—"Improved ventilating apparatus."
Provisional protection only.

NEWTON. 23rd January 1860.

168. ALFRED VINCENT NEWTON, of the Office for Patents, 66, Chancery Lane, in the County of Middlesex, Mechanical Draughtsman, for an invention for—"Improved apparatus for regulating the delivery of yarn from yarn beams."—*A communication from abroad by Luther Robinson, of Boston, in the United States of America.* *Letters Patent sealed.*

FINLAY. 23rd January 1860.

169. ROBERT FREDERICK FINLAY, of Queen Street, Edge Hill, Liverpool, in the County of Lancaster, Master Mariner, for an invention for—"A new method of reefing and furling the sails of ships and vessels from the decks thereof." *Letters Patent sealed.*

APPLEBY. 24th January 1860.

170. JOHN APPLEBY, of the City of Manchester, in the County of Lancaster, Calico Printer, for an invention for—"Improvements in arrangements for and in the manner of embossing and finishing the surfaces of woven fabrics to produce thereon certain appearances, designs or patterns." *Letters Patent sealed.*

GATELLIER. 24th January 1860.

171. EMILE LOUIS GATELLIER, of La Ferté-sous-Jouarre (Seine et Marne), France, Ingeneer, for an invention for—"Improvements in the manufacture of the crucibles, muffles, or pots used for the reduction of the ores of zinc." *Letters Patent sealed.*

GUFFROY. 24th January 1860.

172. CHARLES CONSTANT JOSEPH GUFFROY, Merchant, of No. 3, Duke Street, Adelphi, Westminster, County of Middlesex, for an invention for—"An improved smoke consuming apparatus, and also an improved method of introducing the coal or fuel into it." *Complete specification; Letters Patent sealed.*

CALVERT. 24th January 1860.

173. JOHN CALVERT, of 189, Strand, in the County of Middlesex, Civil Engineer, for an invention for—"Improved methods of easing and distributing the strain on ships' cables when subjected to great tension or pressure." *Provisional protection only.*

REED. 24th January 1860.

174. CHARLES HOLLOWAY REED, of Sunderland, in the County of Durham, Anchor and Chain Cable Manufacturer, for an invention for—"Certain improvements in the construction of anchors." *Letters Patent sealed.*

ILIFFE. 24th January 1860.

175. CHARLES ILIFFE, of Birmingham, in the County of Warwick, Button Manufacturer, for an invention for—"Improvements in double shell buttons." *Letters Patent sealed.*

HUGHES. 24th January 1860.

176. EDWARD JOSEPH HUGHES, of the City of Manchester, in the County of Lancaster, Patent Agent, for an invention for—"Improvements in the manufacture of certain coloring matters by the oxidation of salts of aniline and other salts of a similar nature."—*A communication from abroad by Paul Depoully and Charles Lauth, of Clichy, in the Empire of France.* *Letters Patent sealed.*

BLAXLAND. 24th January 1860.

177. HENRY BLAXLAND, of Sittingbourne, in the County of Kent, Upholsterer, for an invention for—"An improved churn." *Provisional protection only.*

HARRINGTON. 24th January 1860.

178. TIMOTHY HARRINGTON, of Gracechurch Street, in the City of London, Engineer, for an invention for—"Improvements in steam-engines and boilers." *Letters Patent sealed.*

CARTER. 24th January 1860.

179. JOSEPH THRELFALL CARTER, of Sydenham, in the County of Kent, Engineer, for an invention for—"Improvements in machinery for tilling the soil, and in engines and boilers for driving the same and other agricultural implements." *Letters Patent sealed.*

HULME. HULME. 24th January 1860.

180. WALTER HULME, and THOMAS DAVENPORT HULME, both of Congleton, in the County of Cheshire, for an invention for—"Improvements in machinery or apparatus for propelling ships and vessels on the water." *Provisional protection only.*

DONISTHORPE. 24th January 1860.

181. GEORGE EDMOND DONISTHORPE, of Leeds, in the County of York, Top Manufacturer, for an invention for—"An improvement in making cop tubes." *Provisional protection only.*

BARRANS. 24th January 1860.

182. JOSEPH BARRANS, of 2, Caledonian Terrace, Queen's Road, Peckham, in the County of Surrey, for an invention for—"Improvements in steam-boilers." *Provisional protection only.*

BELL. 24th January 1860.

183. ISAAC LOWTHIAN BELL, of Newcastle-on-Tyne, for an invention for—"An improvement in supplying hot blast to furnaces." *Letters Patent sealed; no specification filed.*

NICHOLSON. 25th January 1860.

184. EDWARD CHAMBERS NICHOLSON, of the firm of Simpson, Maule, & Nicholson, of Kennington Road, in the County of Surrey, Manufacturing Chemists, for an invention for—"Improvements in the production of colors for dyeing and printing." *Provisional protection only.*

YATES. 25th January 1860.

185. FREDERIC YATES, of Berlin, but now residing at No. 31, Parliament Street, Westminster, Civil Engineer, for an invention for—"Improved apparatus for generating certain gases to be used as fuel and as reducing agents in metallurgic and other operations, and improvements in furnaces to be heated and worked therewith." *Letters Patent sealed.*

DIXON. CLAYTON. 25th January 1860.

186. JOHN DIXON, and ROBERT CLAYTON, both of Bradford, in the County of York, Engineers, for an invention for—"Improvements in rolling and shaping iron and steel for manufacturing railway wheels." *Provisional protection only.*

RAMSPACHER. SCHMIDT. 25th January 1860.

187. THÉODORE RAMSPACHER, Civil Engineer, and CHRISTOPHE FRÉPÉRIC SCHMIDT, Tailor, of 2, Rue Ste Appoline, Paris, France, for an invention for—"Preparing wire-gauze to render it applicable to various purposes." *Letters Patent sealed.*

PEDRANT. 25th January 1860.

188. AUGUSTE PEDRANT, of No. 1B, Welbeck Street, Cavendish Square, in the County of Middlesex, for an invention for—"A machine for reproducing and engraving at the same time on marble, ivory, shell, all sorts of wood and other matters, the same figure in different sizes." *Provisional protection NOT granted.*

DONKIN. 25th January 1860.

189. THOMAS DONKIN, of the firm of Bryan Donkin and Company, of Bermondsey, in the County of Surrey, Engineers, for an invention for—"An improvement in paper making machines." *Letters Patent sealed.*

GRICE. 25th January 1860.

190. FREDERIC GROOM GRICE, of West Bromwich, in the County of Stafford, Manufacturer, for an invention for—"Improvements in the manufacture of nuts for screws, and in machinery employed in the said manufacture." *Letters Patent sealed.*

KIEFFER. 25th January 1860.

191. FRANÇOIS ANTOINE KIEFFER, of 23, Rue Oudinot, in the City of Paris, for an invention for—"Improvements in fabrics suitable for straps for driving machinery and for other purposes." *Provisional protection only.*

HUNTER. 25th January 1860.

192. ANDREW GEORGE HUNTER, of Pentre Alkali Works, Flint, North Wales, for an invention for—"Improvements in the separation of sulphur from its combinations with certain metals." *Provisional protection only.*

HUGGINS. 25th January 1860.

193. HORATIO JAMES HUGGINS, of the Island of St. Vincent, in the West Indies, for an invention for—"Improvements in filtering and decolorizing cane juice, solutions of sugar and other liquids, and in the manufacture of sugar." *Letters Patent sealed.*

RYDER. CLAY. 25th January 1860.

194. GEORGE RYDER, of Park Street, Lenton, in the County of Nottingham, Engineer, and JOHN CLAY, the younger, of Butcher Street, in the Town and County of the Town of Nottingham, Engineer, for an invention for—"A high pressure stop valve or cock." *Letters Patent sealed.*

LAMAR. 25th January 1860.

195. JEAN PIERRE LAMAR, of Bush Lane, in the City of London, Merchant, for an invention for—"Improvements in boots, shoes, and similar foot-coverings, in fixing the heels and soles thereof, and in apparatus for forming and applying screws for the foregoing and other purposes."—*A communication from abroad by Charles Jarrin, of Rue Bourbon Villeneuve, Paris, France.* *Letters Patent sealed.*

BEARDMORE. 26th January 1860.

196. SEPTIMUS BEARDMORE, of No. 27, Albion Street, Hyde Park, London, W., Civil Engineer, for an invention for—"Improvements in electric telegraphs." *Letters Patent sealed.*

BRINDLEY. 26th January 1860.

197. WILLIAM BRINDLEY, of Queenhithe, Upper Thames Street, in the City of London, for an invention for—"Improvements in the manufacture of paper-board known by paper makers as "middles" extensively used in the manufacture of boxes." *Provisional protection only.*

BANKS. 26th January 1860.

198. THOMAS BANKS, of Ipswich, in the County of Suffolk, Engineer, for an invention for—"Improvements in gas pipe tongs." *Provisional protection only.*

HEMPEL. 26th January 1860.

199. ARTHUR CHARLES HEMPEL, of Ramsgate, in the County of Kent, School Proprietor, for an invention for—"Improvements in fire escapes." *Provisional protection only.*

INGHAM.
HINCHLIFFE.
26th January 1860.

200. JOHN INGHAM, of Bradford, in the County of York, Dyer and Finisher, and GEORGE HINCHLIFFE, of the same place, Book-keeper, for an invention for—"An instrument or apparatus to facilitate and simplify calculations, and particularly adapted for computing the weights of cotton warps, applicable also for woollen and worsted warps and warps of other fibrous substances." *Letters Patent sealed.*

EFFERTZ.
26th January 1860.

201. PETER EFFERTZ, of the City of Manchester, in the County of Lancaster, Engineer, for an invention for—"Improvements in machinery or apparatus for making bricks." *Letters Patent sealed.*

PLUM.
26th January 1860.

202. THOMAS WILLIAM PLUM, of Blaenavon Iron Works, in the County of Monmouth, Iron Master, for an invention for—"Improvements in preparing and fixing iron and other metal plates to ships and other structures." *Letters Patent sealed and specification filed by order.*

MAURER.
26th January 1860.

203. JEAN JACQUES MAURER, of 29, Boulevart St. Martin, Paris, in the Empire of France, Professor of Mathematics, for an invention for—"An improved propeller applicable to various purposes." *Letters Patent sealed.*

NEWTON.
26th January 1860.

204. WILLIAM EDWARD NEWTON, of the Office for Patents, 66, Chancery Lane, in the County of Middlesex, Civil Engineer, for an invention for—"The manufacture of gold in a new form and its use in such form for filling or plugging teeth."—*A communication from abroad by Alfred Joseph Watts, of Utica, in the State of New York, United States of America, Chemist.* *Provisional protection only.*

DAMMANN.
27th January 1860.

205. MAGLOIRE OLIVIER DAMMANN, of 13, Queen's Road, Haverstock Hill, St. Pancrass, London, for an invention for—"An apparatus with chemical process producing fumigations for the cure of the gout, rhumatisms, nerveous debility, and decease of the skin." *Letters Patent sealed; no specification filed.*

VARLEY.
27th January 1860.

206. CROMWELL FLEETWOOD VARLEY, of No. 4, Fortess Terrace, Kentish Town, St. Pancras, Middlesex, for an invention for—"Improvements in electric telegraphs, part of the invention being applicable to other purposes." *Letters Pateat sealed.*

PONCON-JEANDELIZE.
27th January 1860.

207. B. PONÇON-JEANDELIZE (Accountant at M. Buddicom's), residing at Bousecours-prés-Rouen, Seine-Inferieure, France, for an invention for—"An improved eye flap designed to stop horses which have taken fright, by depriving them of sight, and which he calls "blinding eye flap," for which he has obtained in France a patent for invention and improvement for 15 years, bearing the date of the 19th August 1859, No. 41,909." *Letters Patent sealed.*

SYKES.
SYKES.
27th January 1860.

208. REUBEN SYKES, and PHILEMON SYKES, of Huddersfield, in the County of York, Machine Makers, for an invention for—"Improvements in machinery or apparatus employed in spinning, twisting, and roving wool and other fibrous substances." *Letters Patent sealed.*

WALTON.
27th January 1860.

209. FREDERICK WALTON, of Haughton Dale, Denton, near Manchester, for an invention for—"Improvements in the manufacture of varnish and in treating oils, also in the application of products obtained therefrom." *Letters Patent sealed.*

GUERRIER.
27th January 1860.

210. JEAN PIERRE CLAUDE GUERRIER, of Paris, 29, Boulevart St. Martin, in the Empire of France, Mechanician, for an invention for—"Improved apparatus for splitting and preparing the cane for various purposes." *Provisional protection only.*

JOHNSON.
27th January 1860.

211. JOHN HENRY JOHNSON, of 47, Lincoln's Inn Fields, in the County of Middlesex, and of 166, Buchanan Street, in the City of Glasgow, North Britain, Gentleman, for an invention for—"Improvements in inkstands."—*A communication from abroad by Howell Evans and Henry Howson, both of the City of Philadelphia, in the United States of America.* *Letters Patent sealed.*

DUNCAN.
SCOTT.
DAWSON.
27th January 1860.

212. JAMES DUNCAN, & ALEXANDER SCOTT, both of Greenock, in the County of Renfrew, North Britain, Sugar Refiners, and JAMES DAWSON, of the same place, Manager, for an invention for—"Improvements in re-burning animal charcoal, and in the application of the products arising therefrom, and in the apparatus employed therein." *Letters Patent sealed.*

BRIGHAM.
27th January 1860.

213. JOHN BRIGHAM, of Berwick-upon-Tweed, North Britain, Agricultural Implement Maker, for an invention for—"Improvements in machinery or apparatus for sowing or depositing seeds in land." *Provisional protection only.*

NEWTON.
27th January 1860.

214. WILLIAM EDWARD NEWTON, of the Office for Patents, 66, Chancery Lane, in the County of Middlesex, Civil Engineer, for an invention for—"An improved folding frame designed for umbrellas, parasols, tents, awnings, sun blinds, and other analogous structures."—*A communication from abroad by L. K. Selden, of Haddam, in the County of Middlesex, and State of Connecticut, United States of America.*
Letters Patent sealed.

NEWTON.
27th January 1860.

215. WILLIAM EDWARD NEWTON, of the Office for Patents, 66, Chancery Lane, in the County of Middlesex, Civil Engineer, for an invention for—"Improved machinery for printing addresses on newspapers and on wrappers or envelopes, also for punching or indentating wooden or other blocks or plates from which the addresses are to be printed."—*A communication from abroad by Robert Winslow Davis, and Daniel Davis, both of Elmira, County of Chemung, and State of New York, United States of America.* *Letters Patent sealed.*

NICHOLSON.
28th January 1860.

216. JAMES NICHOLSON, of Middleton's Buildings, in the County of Middlesex, Engineer and Gas Fitter, for an invention for—"An improved main cock or tap for regulating and indicating the supply of gas." *Provisional protection only.*

WILKES.
WILKES.
WILKES.
28th January 1860.

217. JOHN WILKES, of Birmingham, in the County of Warwick, Manufacturer, and THOMAS WILKES, of Birmingham, aforesaid, Manufacturer, and GILBERT WILKES, of Birmingham, aforesaid, Manufacturer, for an invention for—"A new or improved method of manufacturing wire for electric telegraphs, and for such other uses as the same is or may be applicable to." *Provisional protection only.*

GRAY.
28th January 1860.

218. ALEXANDER GRAY, of Glasgow, in the County of Lanark, North Britain, Manager, for an invention for—"Improvements in power looms."
Letters Patent sealed.

LORD.
28th January 1860.

219. JAMES LORD, of Rochdale, in the County of Lancaster, Manufacturer, for an invention for—"Improvements in machinery or apparatus employed in the manufacture of cotton and other fibrous materials, called 'roving frames' and 'doubling frames.'" *Letters Patent sealed.*

NIXON.
28th January 1860.

220. CHRISTOPHER NUGENT NIXON, of Ramsgate, in the County of Kent, Gentleman, for an invention for—"Improvements in the construction of mangles, the same being also applicable to other machinery for the pressure of textile fabrics and other substances." *Letters Patent sealed.*

DUNN.
28th January 1860.

221. THOMAS DUNN, of Pendleton, near the City of Manchester, Engineer, for an invention for—"Improvements in machinery and apparatus for altering the position of locomotive engines and carriages, and for preventing injury and accidents on railways." *Letters Patent sealed.*

JOHNSON.
28th January 1860.

222. JOHN HENRY JOHNSON, of 47, Lincoln's Inn Fields, in the County of Middlesex, and of 166, Buchanan Street, in the City of Glasgow, North Britain, Gentleman, for an invention for—"Improvements in the steeling and cementation of metals."—*A communication from abroad by Francois Auguste Dufey, of Paris, in the Empire of France, Iron Master.* *Letters Patent sealed.*

JOHNSON.
28th January 1860.

223. JOHN HENRY JOHNSON, of 47, Lincoln's Inn Fields, in the County of Middlesex, and of 166, Buchanan Street, in the City of Glasgow, North Britain, Gentleman, for an invention for—"Improvements in blowing engines."—*A communication from abroad by Edouard Francois Fossey, of Paris, in the Empire of France, Engineer.* *Letters Patent sealed.*

NICHOLSON.
28th January 1860.

224. EDWARD CHAMBERS NICHOLSON, of the firm of Simpson, Maule and Nicholson, of Kennington Road, in the County of Surrey, Manufacturing Chemists, for an invention for—"Improvements in the production of colours for dyeing or printing." *Provisional protection only.*

SAVAGE.
28th January 1860.

225. ROBERT WATSON SAVAGE, of 15, Saint James' Square, Westminster, in the County of Middlesex, Iron Bedstead Maker, for an invention for—"Improvements in tidal ladders and in steps for embarking and landing purposes."
Provisional protection only.

JEFFREYS.
28th January 1860.

226. JULIUS JEFFREYS, of Richmond, in the County of Surrey, for an invention for—"Improvements in sun blinds." *Letters Patent sealed.*

DAFT.
27th January 1860.

227. THOMAS BARNABAS DAFT, of Tottenham, in the County of Middlesex, Civil Engineer, for an invention for—"Improvements in coating iron."
Letters Patent sealed.

NEWTON.
28th January 1860.

228. WILLIAM EDWARD NEWTON, of the Office for Patents, 66, Chancery Lane, in the County of Middlesex, Civil Engineer, for an invention for—"Improved machinery for carding silk, silk-waste, and other filamentous substances."—*A communication from abroad by Antoine Louis Warnery, of Paris, in the Empire of France.*
Letters Patent sealed.

LANGEN.
28th January 1860.

229. EUGEN LANGEN, of Cologne, in the Kingdom of Prussia, for an invention for—"Improvements in steam-boiler and other furnaces." *Letters Patent sealed.*

WIGZELL.
WIGZELL.
30th January 1860.

230. MONTAGUE WIGZELL, of Friars' Green, Exeter, in the County of Devon, and EUSTACE WIGZELL, of 14, Morden Terrace, Lewisham Road, Greenwich, in the County of Kent, Brothers, for an invention for—"An improved form of land battery for coast and other fortifications." *Provisional protection only.*

BOSSHARDT.
DINGLER.
30th January 1860.

231. HENRY BOSSHARDT, and OTTO DINGLER, of Paris, in the Empire of France, for an invention for—"Improvements in machinery for treating cotton and other fibrous materials." *Provisional protection only.*

WALKER.
30th January 1860.

232. THOMAS WALKER, of Birmingham, in the County of Warwick, Engineer, for an invention for—"Improvements in means for cleansing sewage and other waters." *Letters Patent sealed.*

HODGSON.
CRANE.
30th January 1860.

233. HENRY HODGSON, of Ballyreine, C° Wicklow, and Merlin Park, C° Galway, Ireland, and PATRICK MOIR CRANE, of the Irish Peat Works, Athy, Ireland, for an invention for—"Improvements in manufactures from peat." *Letters Patent sealed.*

HOLMES.
CORDON.
30th January 1860.

234. NATHANIEL JOHN HOLMES, Gentleman, of Hampstead, County Middlesex, and Glasgow, County Lanark, Scotland, and JAMES CORDON, Gentleman, of Stoke-upon-Trent, County of Stafford, for an invention for—"An improved method of purifying fluids or substances by electro magnetism." *Provisional protection only.*

LUIS.
30th January 1860.

235. JOSÉ LUIS, of the British and Foreign Office for Patents, No. 1B, Welbeck Street, Cavendish Square, in the County of Middlesex, Patent Agent, for an invention for—"Improvements in the apparatus for preparing and clarifying resinous substances."—*A communication from abroad by Dromart & Dussillol Brothers, of Paris, in the Empire of France.* *Letters Patent sealed.*

NURSE.
30th January 1860.

236. GEORGE NURSE, of Pontymister, in the Parish of Risca, in the County of Monmouth, for an invention for—"Improvements in the manufacture of tin or 'terne' and galvanized metal plates." *Provisional protection only.*

BROWN.
30th January 1860.

237. HENRY EDWARD BROWN, of Woolwich, in the County of Kent, Coach maker, for an invention for—"Improvements in axles for carriages."
Provisional protection only.

BROOKS.
WATERS.
30th January 1860.

238. EDGAR BROOKS, of Birmingham, in the County of Warwick, Manufacturer, and HENRY WATERS, of Smethwick, in the County of Stafford, Machinist, for an invention for—"New or improved machinery to be used in the manufacture of guns and pistols, and for shaping metallic and non-metallic substances for other purposes." *Letters Patent sealed.*

SWAIN.
30th January 1860.

239. JOSIAH SWAIN, Brass and Ironfounder, of Hyde, in the County of Chester, for an invention for—"Certain improvements in fire-bars and in the means of actuating or shifting the same." *Provisional protection only.*

JOHNSON.
30th Jauuary 1860.

240. JOHN HENRY JOHNSON, of 47, Lincoln's Inn Fields, in the County of Middlesex, and of 166, Buchanan Street, in the City of Glasgow, North Britain, Gentleman, for an invention for—"Improvements in hot air engines."—*A communication from abroad by Stephen Wilcox, the younger, of Westerley, in the County of Washington, in the United States of America.* *Letters Patent sealed.*

MATTHEWMAN.
30th January 1860.

241. BENJAMIN MATTHEWMAN, Junior, of Headford Street, Sheffield, in the County of York, Cutlery Manufacturer, for an invention for—"Improvements in pen and pocket knives, scissors, and every other description of cutlery."
Letters Patent sealed.

CATOR.
30th January 1860.

242. GEORGE ALBEMARLE CATOR, of Selby, in the County of York, Gentleman, for an invention for—"Improvements in machinery for preparing flax, hemp, and other vegetable fibrous substances for scutching or other manufacturing processes." *Letters Patent sealed.*

NEWTON.
30th January 1860.

243. WILLIAM EDWARD NEWTON, of the Office for Patents, 66, Chancery Lane, in the County of Middlesex, Civil Engineer, for an invention for—"An improvement in the construction of soldering irons."—*A communication from abroad by Maria Louise Burbank, of Brooklyn, in the State of New York, and United States of America.* *Provisional protection only.*

RIPLEY.
31st January 1860.

244. ABRAHAM RIPLEY, of 42, Bridge Street, Blackfriars, City of London, Engineer, for an invention for—"The application of the shavings, parings, and refuse of hides and leather to a new manufacture, and in the process and mode of treating or operating the same in order to produce the said new article or fabric." *Provisional protection only.*

TAIT.
31st January 1860.

245. WILLIAM TAIT, of Glasgow, in the County of Lanark, North Britain, Engineer, for an invention for—"Improvements in distilling apparatus."—*A communication from abroad by Thomas Forrester McFarlane, of Demerara, in the Colony of British Guiana.* *Letters Patent sealed.*

SMITH.
31st January 1860.

246. GEORGE SMITH, of Glasgow, in the County of Lanark, North Britain, Ironfounder, for an invention for—"Improvements in monuments, fountains, lamps, letter-boxes, urinals, and such like ornamental and public erections in cast iron." *Letters Patent sealed.*

APPLETON.
31st January 1860.

247. LEONARD APPLETON, 25, Clarence Road South, Kentish Town, London, N.W., for an invention for—"The arrangement and expeditious removal of patterns, invoices, letters, papers, &c., more particularly tailors' patterns." *Letters Patent sealed.*

LARMUTH.
31st January 1860.

248. ALFRED AUGUSTUS LARMUTH, of Salford, in the County of Lancaster, Dentist, for an invention for—"Certain improvements in 'healds' employed in looms for weaving." *Letters Patent sealed.*

SMITH.
31st January 1860.

249. THOMAS SMITH, of 9, Gloucester Terrace, Cambridge Heath, in the County of Middlesex, Chenille Manufacturer, for an invention for—"Improvements in the manufacture of chenille and in apparatus employed therein." *Letters Patent sealed.*

NEWTON.
31st January 1860.

250. WILLIAM EDWARD NEWTON, of the Office for Patents, 66, Chancery Lane, in the County of Middlesex, Civil Engineer, for an invention for—"Improved machinery for cutting dovetails."—*A communication from abroad by Thomas Haley Burley, Charles Henry Phelps, and William James Lowerra, all of New York, in the United States of America.* *Letters Patent sealed.*

OWEN.
31st January 1860.

251. GEORGE OWEN, of Bedford Row, in the County of Middlesex, Dentist, for an invention for—"Improvements in rocking-horses, see-saws, and other analagous vibrating or oscillating contrivances." *Letters Patent sealed.*

CULPIN.
31st January 1860.

252. THOMAS CULPIN, of No. 24, Dowgate Hill, in the City of London, Engineer, for an invention for—"Improvements in waterclosets and all sanitary vessels that require frequent flushing." *Letters Patent sealed.*

BROOMAN.
31st January 1860.

253. RICHARD ARCHIBALD BROOMAN, of 166, Fleet Street, in the City of London, Patent Agent, for an invention for—"Certain arrangements of machinery for forming slivers as they come from the carding engine into threads, and for winding the threads on bobbins."—*A communication from abroad by Louis Victor Lemaignen, of Lisieux, France.* *Letters Patent sealed.*

WALKER.
31st January 1860.

254. EDMUND WALKER, of London Street, in the City of London, Engineer, for an invention for—"Improvements in windlasses." *Provisional protection only.*

COLE.
31st January 1860.

255. RICHARD JOHN COLE, of No. 21, Chepstow Villas West, Bayswater, in the County of Middlesex, Esquire, for an invention for—"Improvements in pencils and in holders for the same." *Letters Patent sealed.*

JOSSA.
31st January 1860.

256. FERDINAND JOSSA, of Sunderland, in the County of Durham, Chemist, for an invention for—"Improvements in the manufacture of sal ammoniac from small and refuse coals and from the gas generated in the manufacture of coke." *Letters Patent sealed.*

HARTLEY.
1st February 1860.

257. WILLIAM HARTLEY, of Bury, in the County of Lancaster, Engineer, for an invention for—"Certain improvements in steam-engines." *Letters Patent sealed.*

HILL.
1st February 1860.

258. THOMAS HILL, of Heywood, in the County of Lancaster, Boiler Manufacturer, for an invention for—"Improvements in steam-boilers." *Letters Patent sealed.*

SHAW.
1st February 1860.

259. BENJAMIN SHAW, of Wellington, in the County of Salop, Builder, for an invention for—"Improvements in stench traps, and in the cesspools or pits of sewers." *Letters Patent sealed.*

AMBLER.
1st February 1860.

260. JOSEPH AMBLER, of Little Horton, in the Parish and Borough of Bradford, and County of York, for an invention for—"Improvements in looms for weaving." *Letters Patent sealed.*

STODDART.
1st February 1860.

261. ALEXANDER STODDART, of Tours, France, for an invention for—"Improvements in submarine telegraphic cables."—*A communication from abroad by John S. Davison, residing at the State of New Jersey, in the U.S. of America.* *Letters Patent sealed.*

HARDING.
1st February 1860.

262. GUSTAVUS PALMER HARDING, of Belleville, Paris, in the Empire of France, Manufacturer, for an invention for—"Improvements in hats and similar coverings for the head." *Provisional protection only.*

HUDDART.
HUDDART.
1st February 1860.

263. GEORGE AUGUSTUS HUDDART, & JOSEPH DURHAM ERSKINE HUDDART, both of Brynkir, in the County of Caernarvon, Gentlemen, for an invention for—"Improvements in obtaining motive-power." *Provisional protection only.*

MATTHEWS.
1st February 1860.

264. JOHN WILLIAM MATTHEWS, of High Street, Poplar, in the County of Middlesex, Hat Manufacturer, for an invention for—"An improvement in the manufacture of hats." *Provisional protection only.*

NEWTON.
1st February 1860.

265. WILLIAM EDWARD NEWTON, of the Office for Patents, 66, Chancery Lane, in the County of Middlesex, Civil Engineer, for an invention for—"Improved apparatus for retarding railway carriages."—*A communication from abroad by Augustin Castellvi, of Saragossa, in the Kingdom of Spain.* *Letters Patent sealed.*

MENNONS.
2nd February 1860.

266. MARC ANTOINE FRANÇOIS MENNONS, of the British and Foreign Patent Offices, 39, Rue de l'Echiquier, Paris, in the Empire of France, for an invention for—"Improved machinery for stripping and extracting the filaments of textile plants, and applicable to the treatment of fibro-ligneous matters in general."—*A communication from Adolphe Boyé, a person resident at Paris.* *Complete specification; Letters Patent sealed.*

HAWKINS.
2nd February 1860.

267. ABDIEL HAWKINS, Glyphographer, of 65, Hatton Garden, London, in the County of Middlesex, for an invention for—"Finishing machine wrought wood carvings, and also for finishing certain wood carvings rough hewn or cut by hand-labour." *Letters Patent sealed.*

INGHAM.
HINCHLIFFE.
2nd February 1860.

268. WILLIAM INGHAM, of Armley, in the County of York, Tanner, and WILLIAM HINCHLIFFE, of Armley, aforesaid, Mechanic, for an invention for—"Improvements in apparatus for applying steam and other vapours, gases, or fluids to the production of motive-power, and which may also be used for a pump or gas exhauster or other similar purpose." *Letters Patent sealed; no specification filed.*

BRETHON.
2nd February 1860.

269. LOUIS JULIEN BRETHON, of Tours, Departement d'Indre et Loire, France, Practical Engineer, for an invention for—"An improved press for the compression of bricks, tiles, and similar articles of either plastic or other suitable compressible materials." *Letters Patent sealed.*

YULE.
2nd February 1860.

270. JOHN YULE, of Glasgow, in the County of Lanark, North Britain, Engineer, for an invention for—"Improvements in steam-boilers." *Provisional protection only.*

REYNOLDS.
2nd February 1860.

271. JOHN REYNOLDS, of 32, St. James' Road, Holloway, London, for an invention for—"An improvement in constructing an endorsing, printing, and stamping press." *Provisional protection only.*

REDRUP.
2nd February 1860.

272. GEORGE REDRUP, of the Loughborough Brewery, Loughborough, in the County of Leicester, Brewer, for an invention for—"Improvements in the means of and apparatus for obtaining and applying motive-power whereby perpetual motion may be obtained." *Provisional protection only.*

FITZGERALD.
2nd February 1860.

273. WILLIAM FITZGERALD, of Fleet Street, in the City of London, Gentleman, for an invention for—"The production of bands or strips for application on petticoats and similar ornamental purposes." *Provisional protection only.*

ROUTLEDGE.
2nd February 1860.

274. THOMAS ROUTLEDGE, of the Eynsham Paper Works, near Oxford, for an invention for—"Improvements in the manufacture of paper."
Letters Patent sealed.

CHATWOOD.
2nd February 1860.

275. SAMUEL CHATWOOD, of 65, Cornwallis St., and 22, South Jno. St., Liverpool, also of 16, Hoghton Street, Southport, in the County of Lancaster, for an invention for—"Improvements in sewing or stitching machines."
Letters Patent sealed.

DENNY.
DENNY.
2nd February 1860.

276. ABRAHAM DENNY, and EDWARD MAYNARD DENNY, both of Waterford Ireland, for an invention for—"An improved method of and apparatus for singeing pigs."
Letters Patent sealed.

TOOTH.
2nd February 1860.

277. WILLIAM HENRY TOOTH, of Spring Terrace, Wandsworth Road, in the County of Surrey, Engineer, for an invention for—"Improved machinery or apparatus to be employed in the manufacture, melting, or refining of iron and steel, and in the manufacture of puddled steel and wrought iron."
Letters Patent sealed.

GEDGE.
3rd February 1860.

278. JOHN GEDGE, of the firm of John Gedge & Son, of No. 4, Wellington Street South, Strand, in the County of Middlesex, Patent Agents, for an invention for—"Improvements in amalgamating metals or producing alloys."—*A communication from abroad by Johann Aich, Officer in the I. R. Marine, Venice.*
Complete specification; Letters Patent sealed.

BARRÉ.
3rd February 1860.

279. LEON PIERRE BARRÉ, of Paris, in the Empire of France, and of 4, South Street, Finsbury, London, Gentleman, for an invention for—"Certain improvements in steam-boilers."
Letters Patent sealed.

WATKINS.
3rd February 1860.

280. ALEXANDER WATKINS, of No. 67, Strand, in the County of Middlesex, Chronometer and Watch Maker, for an invention for—"Improvements in time-keepers."
Letters Patent sealed.

HARPER.
3rd February 1860.

281. JAMES HARPER, of Wilson Street, Belfast, in the County of Antrim, Ireland, Machine Maker, for an invention for—"Improvements in roving frames."
Provisional protection only.

HOWES.
BURLEY.
3rd February 1860.

282. WALTER HOWES, of Birmingham, in the County of Warwick, Manufacturer, and WILLIAM BURLEY, of Birmingham, aforesaid, Manager of Works, for an invention for—"A new or improved method of attaching lamps and whip sockets to carriages."
Letters Patent sealed.

HALL.
3rd February 1860.

283. JOHN HALL, of Blackburn, in the County of Lancaster, Tea Dealer, for an invention for—"Improvements in sewing-machines."
Provisional protection only.

BLACKBURN.
KNOWLES.
3rd February 1860.

284. THOMAS BLACKBURN, and MARK KNOWLES, of Blackburn, in the County of Lancaster, Machinists, for an invention for—"Improvements in beams for warping, sizing, dressing, and weaving machines."
Letters Patent sealed.

ADAMS.
3rd February 1860.

285. ROBERT ADAMS, of King William Street, in the City of London, Gun Manufacturer, for an invention for—"Improvements in breech-loading guns, and in making up cartridges for the same."
Letters Patent sealed.

FIELDEN.
FIELDEN.
3rd February 1860.

286. ROBERT FIELDEN, Jun^{r}, of Walsden, in the County of Lancaster, Picker Manufacturer, and THOMAS FIELDEN, of the same place, also Picker Manufacturer, for an invention for—"An improvement or improvements in machinery for cutting hides or skins into fillets, strips, or shreds, and also in the manufacture of pickers to be used in looms for weaving, and apparatus connected therewith."
Letters Patent sealed.

LORBERG.
3rd February 1860.

287. WILLIAM LORBERG, of Number 34, Saint Mary at Hill, in the City of London, and of Wellington Road, in the County of Surrey, Commission Merchant, for an invention for—"A new or improved method of employing tan or spent bark for chemical purposes."
Provisional protection only.

BODMER.
3rd February 1860.

288. RUDOLPH BODMER, of 2, Thavies Inn, Holborn, in the City of London, for an invention for—"Improvements in machinery for converting into down or fibres capable of being spun the remnants or cuttings or other waste pieces of silk or other fabrics."—*A communication from abroad by Charles Luvandoski, of Paris, in the Empire of France.*
Letters Patent sealed.

NEWTON. 3rd February 1860.

289. WILLIAM EDWARD NEWTON, of the Office for Patents, 66, Chancery Lane, in the County of Middlesex, Civil Engineer, for an invention for—"Improvements in piston packing."—*A communication from abroad by Charles Lowery, of Brooklyn, State of New York, and Horace Alonzo Miller, of the City of New York, United States of America.* *Letters Patent sealed.*

BROOMAN. 3rd February 1860.

290. RICHARD ARCHIBALD BROOMAN, of 166, Fleet Street, in the City of London, Patent Agent, for an invention for—"An improvement in the manufacture of iron and in furnaces to be employed therein."—*A communication from abroad by Ernest Tourangin, of Paris.* *Provisional protection only.*

BROOMAM. 3rd February 1860.

291. RICHARD ARCHIBALD BROOMAN, of 166, Fleet Street, in the City of London, Patent Agent, for an invention for—"An improvement in tanning."—*A communication from abroad by Laurent Rocher, of Saumur, France.* *Provisional protection only.*

MENNONS. 4th February 1860.

292. MARC ANTOINE FRANÇOIS MENNONS, of the British and Foreign Patent Offices, 39, Rue de l'Echiquier, Paris, in the Empire of France, for an invention for—"An improved means of joining surfaces of leather."—*A communication from A. L. Dezaux-Lacour, a person resident in Paris.*
Complete specification; Letters Patent sealed.

WILLANS. 4th February 1860.

293. JACOB GEOGHEGAN WILLANS, of No. 2, Clarence Place, Belfast, in the County of Antrim, in Ireland, for an invention for—"Improvements in the manufacture of soda." *Letters Patent sealed.*

TAYLOR. 4th February 1860.

294. JAMES TAYLOR, of Birkenhead, Engineer, for an invention for "Improvements in locomotive engines and wheel carriages." *Provisional protection only.*

KERR. 4th February 1860.

295. ANDREW KERR, of Newton Heath, near Manchester, in the County of Lancaster, Weaver, for an invention for—"Improvements in jacquard machines." *Letters Patent sealed.*

DAHLKE, 4th February 1860.

296. JULIUS GUSTAV DAHLKE, of Kingsland Road, in the County of Middlesex, Chemist, for an invention for—"Improved filtering compositions and improvements in filtering vessels and apparatuses." *Letters Patent sealed.*

UREN. 4th February 1860.

297. EDWARD WILLS UREN, of Hoomeavy-Meavy, in the County of Devon, for an invention for—"Improvements in a rotary steam-engine." *Letters Patent sealed.*

ROBERTSON. 4th February 1860.

298. PATRICK ROBERTSON, of Sun Court, Cornhill, in the City of London, for an invention for—"Improvements in brewing beer, ale and porter, also in separating brewers' worts from grain, and beer, ale and porter from yeast and other matters, and also in apparatus used for these and like purposes." *Letters Patent sealed.*

BIDDELL. 4th February 1860.

299. GEORGE ARTHUR BIDDELL, of Ipswich, for an invention for—"Improvements in projectiles." *Letters Patent sealed.*

LESPADIN. 4th February 1860.

300. FRANÇOIS LESPADIN, of Paris, France, Mechanician, for an invention for—"An improved mode of manufacturing decanters and other similar articles in glass or crystal of a rounded form." *Provisional protection only.*

LAUNAY. DE VERNEZ. 4th February 1860.

301. CHARLES THEODULE LAUNAY, and AUGUSTE MARIE ALEXANDRE DOMINÉ DE VERNEZ, both of Paris, France, Gentlemen, for an invention for—"An improved valve or cock for regulating or stopping the passage of gas, steam, water or other fluids." *Letters Patent sealed.*

LAUNAY. DE VERNEZ. 4th February 1860.

302. CHARLES THEODULE LAUNAY, and AUGUSTE MARIE ALEXANDRE DOMINÉ DE VERNEZ, both of Paris, France, Gentlemen, for an invention for—"An improved apparatus for carburating hydrogen or other gas for illuminating purposes." *Letters Patent sealed.*

INCHLEY. 4th February 1860.

303. JOSEPH INCHLEY, of Birmingham, in the County of Warwick, Manufacturer, for an invention for—"Improvements in propelling canal boats and other vessels." *Provisional protection only.*

SPURRIER. 4th February 1860.

304. WILLIAM SPURRIER, of Birmingham, in the County of Warwick, Manufacturer, for an invention for—"Improvements in shaping metals and in machinery employed for that purpose." *Letters Patent sealed.*

BIRCH. 4th February 1860.

305. JOHN BIRCH, of Duren, in the Kingdom of Prussia, at present residing in Birmingham, in the County of Warwick, Civil Engineer, for an invention for—"Improvements in the construction of smoke consuming furnaces."
Provisional protection only.

NEWTON.
4th February 1860.

306. ALFRED VINCENT NEWTON, of the Office for Patents, 66, Chancery Lane, in the County of Middlesex, Mechanical Draughtsman, for an invention for—"An improved construction of combination steam gauge."—*A communication from abroad by E. G. Allen, of Boston, in the United States of America.* *Letters Patent sealed.*

NEWTON.
4th February 1860.

307. ALFRED VINCENT NEWTON, of the Office for Patents, 66, Chancery Lane, in the County of Middlesex, Mechanical Draughtsman, for an invention for—"An improvement in the construction of ships' stoves."—*A communication from abroad by George Alexander New, of New York.* *Letters Patent sealed*

SMITH.
4th February 1860.

308. JOHN SMITH, of Birmingham, in the County of Warwick, Manufacturer, for an invention for—"Improvements in the manufacture of handles or knobs for sticks, umbrellas and parasols, for swords, knives, forks and other articles of cutlery, for pistol butts and small arms' stocks, and for other similar articles."
Letters Patent sealed.

SMITH.
4th February 1860.

309. JOHN SMITH, of Birmingham, in the County of Warwick, Manufacturer, for an invention for—"Improvements in the manufacture of furniture for doors and drawers, bell levers, curtain band, cornice pole, and lamp and chandelier enrichments, and the ornamental parts of other similar articles." *Letters Patent sealed.*

BOYD.
6th February 1860.

310. JAMES EDWARD BOYD, of Hither Green, Lewisham, in the County of Kent, Gentleman, for an invention for—"Improvements in carriages and other conveyances used for the conveyance of children, adults, and invalids."
Letters Patent sealed; specification filed by order.

SKERTCHLY.
6th February 1860.

311. JOSEPH SKERTCHLY, of Ashby-de-la-Zouch, in the County of Leicester, Engineer, for an invention for—"Improvements in apparatus for evaporating the moisture from slip for potters' use." *Letters Patent sealed.*

WALTON.
6th February 1860.

312. JOHN WHITEHEAD WALTON, Esther Cottages, Ponders End, in the County of Middlesex, Gentleman, for an invention for—"Improvements in rifles and other small fire-arms." *Letters Patent sealed.*

NEWTON.
6th February 1860.

313. ALFRED VINCENT NEWTON, of the Office for Patents, 66, Chancery Lane, in the County of Middlesex, Mechanical Draughtsman, for an invention for—"An improvement in laying submarine electric telegraph cables."—*A communication from abroad by James Bell Alexander, of New York.* *Provisional protection only.*

NEWTON.
6th February 1860.

314. ALFRED VINCENT NEWTON, of the Office for Patents, 66, Chancery Lane, in the County of Middlesex, Mechanical Draughtsman, for an invention for—"An improved mode of producing certain compounds of lead."—*A communication from abroad by Ferdinand Feist Mayer, of New York.* *Provisional protection only.*

M'NAUGHT.
6th February 1860.

315. WILLIAM M'NAUGHT, of Rochdale, in the County of Lancaster, Engineer, for an invention for—"Improvements in steam-engines and in apparatus connected therewith." *Provisional protection only.*

ROECKNER.
6th February 1860.

316. CARL HEINRICH ROECKNER, of Marsh Street, Bristol, Somersetshire, for an invention for—"Improvements in the construction of millstones for grinding."
Provisional protection only.

TYE.
ANDREW.
6th February 1860.

317. THOMAS TYE, and CHARLES WILLIAM ANDREW, of Brixton Road, in the County of Surrey, Builders, for an invention for—"An improved method of trapping sinks, especially adapted for kitchen and scullery sinks in domestic dwellings, to prevent escape of noxious effluvia therefrom." *Letters Patent sealed.*

ROBERTS.
7th February 1860.

318. MARTYN JOHN ROBERTS, of Crickhowell, in the County of Brecon, Esquire, for an invention for—"Improvements in breech-loading fire-arms."
Provisional protection only.

WILSON.
7th February 1860.

319. WILLIAM NEWTON WILSON, of 144, High Holborn, in the County of Middlesex, Manufacturer of Sewing Machines, for an invention for—"Improvements in sewing-machines and apparatus connected therewith."—*The first part is a communication from abroad by Lucius Bigelow, of Boston, United States, and the remainder is his own invention.* *Provisional protection only.*

WHITEHEAD.
7th February 1860.

320. JOHN WHITEHEAD, of Preston, in the County of Lancaster, Agricultural Implement Maker, for an invention for—"Improvements in moulding or shaping clay and other plastic materials, and in the apparatus employed therein."
Provisional protection only.

PROU-GAILLARD.
7th February 1860.

321. AUGUSTE PROU-GAILLARD, of 29, Boulevart St. Martin, Paris, in the Empire of France, Merchant, for an invention for—"Improvements in vessels for containing solid or fluid matters of all sorts." *Letters Patent sealed.*

CHARTROULE.
7th February 1860.

322. PAUL CHARTROULE, of 29, Boulevart St. Martin, Paris, in the Empire of France, Doctor, for an invention for—"Iodine inhaling means and apparatus for medical purposes." *Letters Patent sealed.*

JENNINGS.
7th February 1860.

323. HENRY CONSTANTINE JENNINGS, of 8, Great Tower Street, in the City of London, Practical Chemist, for an invention for—"Improvements in the manufacture of pulp." *Letters Patent sealed.*

BREITTMAYER.
7th February 1860.

324. AIMÉ LOUIS EUGÈNE BREITTMAYER, of No. 14, Rue de Bruxelles, in the City of Paris, in the Empire of France, Merchant, for an invention for—"Improvements in machinery for and in engraving the metallic surfaces of printing rollers or cylinders." *Letters Patent sealed.*

NEWTON.
7th February 1860.

325. WILLIAM EDWARD NEWTON, of the Office for Patents, 66, Chancery Lane, in the County of Middlesex, Civil Engineer, for an invention for—"Rendering waste 'vulcanized,' 'hermized,' and 'changed' or 'converted' india-rubber and india-rubber compounds useful and capable of being reworked for the manufacture of a great variety of articles of trade and commerce."—*A communication from abroad by John H. Cheever, of New York.* *Letters Patent sealed.*

NEWTON.
7th February 1860.

326. WILLIAM EDWARD NEWTON, of the Office for Patents, 66, Chancery Lane, in the County of Middlesex, Civil Engineer, for an invention for—"Improvements in the fittings of sun shades or roller blinds."—*A communication from abroad by Valorus Drew, of New York.* *Letters Patent sealed.*

HALL.
7th February 1860.

327. COLLINSON HALL, of Navestock, in the County of Essex, Agriculturalist, for an invention for—"Improvements in steam tilling machinery and apparatuses." *Letters Patent sealed.*

COOPER.
7th February 1860.

328. JOSEPH ROCK COOPER, of Birmingham, in the County of Warwick, Gun Manufacturer, for an invention for—"Improvements in breech-loading fire-arms and ordnance." *Letters Patent sealed.*

LEA.
7th February 1860.

329. EDMUND LEA, of Hill Top, West Bromwich, in the County of Stafford, Mill and Forge Manager, for an invention for—"An improvement or improvements in the manufacture of iron and steel tubes." *Letters Patent sealed.*

DALGETY.
8th February 1860.

330. ALEXANDER DALGETY, of 5, Shards Terrace, High Street, Peckham, in the County of Surrey, Watchmaker, for an invention for—"Improvements of watches, clocks, and chronometers." *Letters Patent sealed.*

JENKINS.
8th February 1860.

331. GEORGE JENKINS, Tyne Cottage, Hanwell, Middlesex, for an invention for—"The application of the dovetail joints in iron or other metal to wooden bedsteads, couches, sofas, and other such like articles of furniture, together with metallic sides, ends, and laths securely fixed thereto by means of the dovetail joints." *Provisional protection only.*

ROWAN.
HORTON.
8th February 1860.

332. JOHN MARTIN ROWAN, of Glasgow, in the County of Lanark, and THOMAS ROGERS HORTON, of Birmingham, in the County of Warwick, both Engineers, for an invention for—"Improvements in steam-engines and boilers." *Letters Patent sealed.*

WAIN.
8th February 1860.

333. WILLIAM WAIN, of Copenhagen, in the Kingdom of Denmark, Engineer, for an invention for—"Improvements in steam-engines and in apparatus for superheating steam." *Letters Patent sealed.*

MOODY.
8th February 1860.

334. CHARLES PETERS MOODY, of Corton Denham, in the County of Somerset, Agriculturalist, for an invention for—"Improvements in carrying, supporting, and shifting engines used in ploughing and other agricultural operations, and in apparatuses employed therein." *Provisional protection only.*

JOHNSON.
8th February 1860.

335. JOHN HENRY JOHNSON, of 47, Lincoln's Inn Fields, in the County of Middlesex, and of 166, Buchanan Street, in the City of Glasgow, North Britain, Gentleman, for an invention for—"Improvements in obtaining motive-power and in the machinery or apparatus employed therein."—*A communication from abroad by Jean Joseph Etienne Lenoir, of Paris, in the Empire of France.* *Letters Patent sealed.*

MILLER.
8th February 1860.

336. JOHN MILLER, of the Fort, in the Town and County of Ayr, North Britain, Gentleman, for an invention for—"Improvements in propelling vessels, ships, and boats." *Provisional protection only.*

PIDDING.
8th February 1860.

337. WILLIAM PIDDING, of the Borough Road, Southwark, in the County of Surrey, Gentleman, for an invention for—"Improvements in needles." *Provisional protection only.*

WHIGHT.
8th February 1860.

338. GEORGE WHIGHT, of Ipswich, in the County of Suffolk, Builder, for an invention for—"Improvements in sewing machines."—*A communication from abroad by Theodore S. Washburn, of Rochester City, New York State, United States of America.* *Letters Patent sealed.*

BEARD.
8th February 1860.

339. WILLIAM BEARD, of 62, Cannon Street West, in the City of London, Manufacturer, for an invention for—"Improvements in adapting bead work and bugle work to harness and whip handles." *Provisional protection only.*

WILLINGTON.
8th February 1860.

340. HENRY WILLINGTON, of Sumner Place, Brompton, in the County of Middlesex, for an invention for—"Improvements in spectacles." *Provisional protection NOT granted.*

DURAND.
8th February 1860.

341. JULES EMILE DURAND, of Paris, in the French Empire, Manufacturer, for an invention for—"The manufacture of poppy-paper." *Letters Patent sealed.*

HUDDART.
8th February 1860.

342. GEORGE AUGUSTUS HUDDART, of Brynkir, in the County of Caernarvon, Gentleman, for an invention for—"Improvements in apparatus for obtaining motive-power." *Provisional protection only.*

NEWTON.
8th February 1860.

343. WILLIAM EDWARD NEWTON, of the Office for Patents, 66, Chancery Lane, in the County of Middlesex, Civil Engineer, for an invention for—"Improvements in rails, rail supports, and fastenings, and the nut fastenings of rail-bolts for the permanent way of railroads."—*A communication from abroad by George Willard Reed Bayley, of Brashear, Louisiana, United States of America.* *Letters Patent sealed.*

COCKER.
8th February 1860.

344. JAMES COCKER, of Liverpool, in the County of Lancaster, Wire Drawer, for an invention for—"Improved apparatus for indicating the number of passengers carried by public vehicles." *Provisional protection only.*

LANGFORD.
CHESTER.
8th February 1860.

345. JOHN LANGFORD, of Orzen Street, of the Town and County of the Town of Nottingham, Machine Builder and Publican, and CHARLES CHESTER, of Bloomsgrove, in the Parish of Radford, in the County of Nottingham, Steam-engine Boiler Manufacturer, for an invention for—"Improvements in cooling liquids." *Letters Patent sealed.*

CARVER.
8th February 1860.

346. JAMES CARVER, of the firm of Messieurs Carver and Mosley, of "The Butcher Street Works," in the Town and County of the Town of Nottingham, Bobbin and Carriage Manufacturers, for an invention for—"Improvements in the manufacture of combs used in pusher machines for the making of lace or other articles, and in the manufacture of counters used when casting the same." *Letters Patent sealed.*

WILSON.
WILSON.
9th February 1860.

347. GEORGE FAIRBAIRN WILSON, and WILLIAM CHARLES WILSON, of South Kirby, near Pontefract, in the County of York, Ridge-stone Manufacturers, for an invention for—"Improvements in the manufacture of ridge-stones and scythe-stones, and in the machinery or apparatus employed for that purpose, which machinery is also applicable for other similar purposes." *Provisional protection only.*

STUART.
9th February 1860.

348. CHARLES STUART, of Halifax, in the County of York, Mechanic, for an invention for—"Improvements in machinery or apparatus for the manufacture of soles for clogs, shoes, and pattens." *Provisional protection only.*

LUPTON.
BLEASDALE.
9th February 1860.

349. JOHN CLEGG LUPTON, and JOSEPH BLEASDALE, both of Church, near Accrington, in the County of Lancaster, Roller Makers, for an invention for—"Improvements in machines for preparing and spinning cotton and other fibrous materials." *Letters Patent sealed.*

HUGHES.
9th February 1860.

350. EDWARD THOMAS HUGHES, of the firm of Hughes and Son, 123, Chancery Lane, London, Patent Agents, for an invention for—"Improvements in scouring wool and in machinery or apparatus employed therein."—*A communication from abroad by Isaie Drubay, of Cambrai (Nord), Engineer, and Marie Mace Fremont, of Paris, both in the Empire of France.* *Provisional protection only.*

GILBEE.
9th February 1860.

351. WILLIAM ARMAND GILBEE, of No. 4, South Street, Finsbury, London, Patent Agent, for an invention for—"Improvements in treating saccharine fluids."—*A communication from abroad by Edmond Pesier, of Valenciennes, France.*
Letters Patent sealed.

DEACON.
ROBINSON.
9th February 1860.

352. HENRY DEACON, of Widnes, in the County of Lancaster, Alkali Manufacturer, and THOMAS ROBINSON, of St. Helen's, in the same County, Iron Founder, for an invention for—"Improvements in the manufacture of soda."
Letters Patent sealed.

SMITH.
BOLLAND.
9th February 1860.

353. JOHN JOBSON SMITH, of Sheffield, trading under the firm of Stuart and Smith, and CHRISTOPHER BOLLAND, also of Sheffield, Designer and Modeller to the aforesaid John Jobson Smith, for an invention for—"Improvements in fenders and fire guards." *Provisional protection only.*

WHITE.
9th February 1860.

354. GEORGE WHITE, of 34, Dowgate Hill, Cannon Street, in the City of London, for an invention for—"An improved machine for moulding candles."—*A communication from abroad by Messrs. J. Seeger & Co., of Esslingen, Wurtemberg.*
Letters Patent sealed.

OXLEY.
9th February 1860.

355. WILLIAM OXLEY, of Manchester, in the County of Lancaster, Mill Furnisher, for an invention for—"Improvements in apparatus for extinguishing fires in manufactories and other buildings." *Provisional protection only.*

RAMMELL.
10th February 1860.

356. THOMAS WEBSTER RAMMELL, of 1, St. Alban's Place, St. James's, in the County of Middlesex, Civil Engineer, for an invention for—"Improvements in pneumatic railways and tubes." *Letters Patent sealed.*

ADIE.
10th February 1860.

357. PATRICK ADIE, of the Strand, in the County of Middlesex, Mathematical Instrument Maker, for an invention for—"Improvements in the means and apparatus for measuring angular and actual distances." *Letters Patent sealed.*

DAWES.
10th February 1860.

358. JOHN SAMUEL DAWES, of Smethwick House, near Birmingham, Gentleman, for an invention for—"An improvement or improvements in breech loading fire-arms and ordnance." *Provisional protection only.*

AULD.
10th February 1860.

359. DAVID AULD, of Glasgow, in the County of Lanark, North Britain, Engineer, for an invention for—"Improvements in machinery or apparatus for supplying steam-boilers with water." *Letters Patent sealed.*

YARROW.
NEILSON.
10th February 1860.

360. THOMAS RICHARDSON YARROW, of Arbroath, in the County of Forfar, and WALTER MONTGOMERIE NEILSON, of Glasgow, in the County of Lanark, both Engineers, for an invention for—"Improvements in steam-engines and boilers."
Provisional protection only.

EARNSHAW.
GRAYSTON.
SHACKLETON.
STELL.
10th February 1860.

361. ABEL EARNSHAW, Mechanic, ELIAS GRAYSTON, Mechanic, JAMES SHACKLETON, Overlooker, and WILLIAM STELL, Mechanic, all of Keighley, in the County of York, for an invention for—"An improvement in the spinning of wool, cotton, flax, alpaca, mohair, and other fibrous substances."
Provisional protection only.

BONNET.
10th February 1860.

362. BENOIT BONNET, of Salford, in the County of Lancaster, Manufacturer, for an invention for—"Certain improvements in jacquard apparatus to be employed in looms for weaving." *Provisional protection only.*

PARRISH.
10th February 1860.

363. HENRY PARRISH, of Balsall Heath, in the County of Worcester, Manufacturer, for an invention for—"An improvement in pressure guages, the which is also applicable to vacuum guages." *Provisional protection only.*

BOSTOCK.
10th February 1860.

364. GEORGE WESTON BOSTOCK, of George Street, Blackfriars Road, in the County of Surrey, Tailor, for an invention for—"Improved apparatus for taking the measure of the human body." *Provisional protection only.*

HUDDART.
10th February 1860.

365. GEORGE AUGUSTUS HUDDART, of Brynkir, in the County of Caernarvon, Gentleman, for an invention for—"Improvements in obtaining and applying motive-power." *Provisional protection only.*

WESSON.
10th February 1860.

366. DANIEL WESSON, of No. 7, Granby Street, Hampstead Road, in the County of Middlesex, Pianoforte Manufacturer, for an invention for—"Improvements in the manufacture of piano-fortes." *Provisional protection only.*

DENISON. 11th February 1860.

367. HENRY DEAN DENISON, of No. 17, Brunswick Street, Leeds, in the County of York, Weighing Machine Maker, for an invention for—"Improvements in the construction of suspended weighing machines, applicable to cranes and other lifting apparatus." *Letters Patent sealed.*

DIETZ. 11th February 1860.

368. DAVID DIETZ, of No. 60, Boulevart de Strasbourg, Paris, Engineer to the French Eastern Railway Company, for an invention for—"An improved oil box for lubricating the axletrees of railway carriages or waggons, applicable also to the shafts of all kinds of machines." *Letters Patent sealed.*

ROMEU. 11th February 1860.

369. FRANÇOIS ROMEU, of Paris, in the Empire of France, Merchant, for an invention for—"Improved hair pins." *Provisional protection only.*

ALDRED, MAYNES. 11th February 1860.

370. WILLIAM ALDRED, and JOHN MAYNES, both of Manchester, in the County of Lancaster, Mill Furnishers and Agents, for an invention for—"Improvements in apparatus applicable to steam-boilers for liberating steam therefrom either in the event of excessive pressure or of deficiency of water, for giving audible signals in the like cases, and for regulating the supply of water thereto." *Provisional protection only.*

NEVILL, BARK. 11th February 1860.

371. WILLIAM NEVILL, and CHARLES BARK, both of Godalming, in the County of Surrey, for an invention for—"Improvements in the manufacture of fleecy web." *Provisional protection only.*

WRIGHT. 11th February 1860.

372. JAMES WRIGHT, of 42, Bridge Street, Blackfriars, City of London, Engineer, for an invention for—"Improvements in the construction of water-closets."—*A communication from abroad by Max Schloss, of Stockholm, Kingdom of Sweden.* *Provisional protection only.*

SHEDDEN. 11th February 1860.

373. THOMAS SHEDDEN, of Ardgarton House, in the County of Argyle, North Britain, Gentleman, for an invention for—"Improvements in fire-arms." *Letters Patent sealed.*

JOHNSON. 11th February 1860.

374. JOHN HENRY JOHNSON, of 47, Lincoln's Inn Fields, in the County of Middlesex, and of 166, Buchanan Street, in the City of Glasgow, North Britain, Gentleman, for an invention for—"Improvements in sewing-machines."—*A communication from abroad by Samuel Comfort, the younger, of Morrisville, and Francis H. Jackson, of Bristol, both in Bucks County, State of Pennsylvania, United States of America.* *Provisional protection only.*

HENRY. 11th February 1860.

375. ALEXANDER HENRY, of Edinburgh, in the County of Mid Lothian, Gun Maker, for an invention for—"Improvements in apparatus for cleaning fire-arms." *Letters Patent sealed.*

PURNELL. 11th February 1860.

376. BENJAMIN PURNELL, of Birmingham, in the County of Warwick, Engineer, for an invention for—"Improvements in hot water apparatus applicable to the heating of buildings, supplying baths and laundries, and other similar uses." *Letters Patent sealed.*

NEWTON. 11th February 1860.

377. ALFRED VINCENT NEWTON, of the Office for Patents, 66, Chancery Lane, in the County of Middlesex, Mechanical Draughtsman, for an invention for—"An improved construction of joints for railway bars or rails."—*A communication from abroad by George Smith Avery, of Cross River, Westchester, in the United States of America.* *Letters Patent sealed.*

HUMPHRYS. 11th February 1860.

378. EDWARD HUMPHRYS, of Deptford, in the County of Kent, Engineer, for an invention for—"Improvements in marine steam-boilers." *Letters Patent sealed.*

MITTON, PENNEY. 11th February 1860.

379. WILLIAM MITTON, of the City of Lincoln, Wire Worker, and JOHN PENNEY, of the same place, Agricultural Merchant, for an invention for—"Improvements in apparatuses employed for cleaning, dressing, winnowing, separating, and sifting grain and seeds and such like matters." *Letters Patent sealed.*

HARWOOD. 11th February 1860.

380. WILLIAM HARWOOD, late of Mendlesham, and now of Stowmarket, in the County of Suffolk, Esquire, for an invention for—"Improvements in machinery for reaping and mowing." *Letters Patent sealed.*

COLE. 11th February 1860.

381. RICHARD JOHN COLE, of No. 21, Chepstow Villas, Bayswater, in the County of Middlesex, Esquire, for an invention for—"Improvements in the manfacture of lead and other materials for pencils." *Letters Patent sealed.*

HEWETSON. 13th February 1860.

382. HENRY HEWETSON, of Blackheath, in the County of Kent, Merchant, for an invention for—"Improvements in rockets." *Provisional protection only.*

TELFORD. 13th February 1860.

383. RICHARD TELFORD, of Birmingham, in the County of Warwick, Cabinet Brass Founder, for an invention for—"Improvements in castors." *Provisional protection only.*

HADDAN. 13th February 1860.

384. JOHN COOPE HADDAN, of Bessborough Gardens, Pimlico, in the County of Middlesex, Civil Engineer, for an invention for—"Improvements in the manufacture of guns and of projectiles to be used therewith." *Letters Patent sealed.*

READMAN. 13th February 1860.

385. WILLIAM READMAN, of Leighton Buzzard, in the County of Bedford, Chemist and Druggist, for an invention for—"An improved apparatus for communicating motion to roller blinds, maps, and other articles." *Letters Patent sealed.*

GREEN. 13th February 1860.

386. JOHN GREEN, of Newtown, in the Parish of Saint Martin, in the County of Worcester, Agriculturist, for an invention for—"Improvements in machinery or apparatus for drilling and distributing or sowing broad cast lime, salt, soot, guano, and other manures." *Letters Patent sealed.*

LANDSBERG. 13th February 1860.

387. EDOUARD LANDSBERG, Aîné, of Paris, France, Manufacturer of Small Wares, for an invention for—"Improvements in buttons, studs, or other similar fastenings for wearing apparel or other purposes." *Letters Patent sealed.*

BALLANDE. 13th February 1860.

388. JEAN AUGUSTE HILARION BALLANDE, of Paris, France, Gentleman, for an invention for—"An improved paper and ink for writing and printing purposes." *Letters Patent sealed.*

SHEDDEN. 13th February 1860.

389. THOMAS SHEDDEN, of Ardgartan House, in the County of Argyle, North Britain, Gentleman, for an invention for—"Improvements in the manufacture of cartridge cases for fire-arms, and in the arrangement of primers therefor." *Letters Patent sealed.*

COLE. 13th February 1860.

390. RICHARD JOHN COLE, of No. 21, Chepstow Villas West, Bayswater, in the County of Middlesex, Esquire, for an invention for—"Improvements in the construction of brushes." *Letters Patent sealed.*

MARSH. 13th February 1860.

391. JOHN MARSH, of London Road, Nottingham, in the Town and County of the Town of Nottingham, for an invention for—"Improvements in sewing-machines." *Letters Patent sealed.*

GOSSAGE. 13th February 1860.

392. WILLIAM GOSSAGE, of Widnes, in the County of Lancaster, Chemist, for an invention for—"Improvements in the manufacture of certain kinds of soap." *Letters Patent sealed.*

BOWLEY. 13th February 1860.

393. KANZOW THOMAS BOWLEY, of the firm of Bowley and Company, of Charing Cross, in the Parish of Saint Martin's in the Fields, in the City of Westminster, Military and Civil Bootmakers, Gaiter Makers, and Tailors, for an invention for—"An improved knee-cap for military, sporting, or other purposes." *Provisional protection only.*

CLARK. 13th February 1860.

394. WILLIAM CLARK, of 53, Chancery Lane, in the County of Middlesex, Engineer and Patent Agent, for an invention for—"Improvements in apparatus used for stretching, drying, and finishing woven fabrics."—*A communication from abroad by Alphonse Delharpe, of Tarare, Rhone, in the Empire of France.* *Letters Patent sealed.*

HOWARD. HOWARD. 13th February 1860.

395. LEWIS JOHN THOMAS HOWARD, and LEWIS HOWARD, both of West Street, Green Street, Bethnal Green, in the County of Middlesex, Sieve Makers, for an invention for—"Improvements in the fabric or material used for bolting or sifting flour and other matters." *Letters Patent sealed.*

COPPING. 14th February 1860.

396. SAMUEL COPPING, of 27, Tokenhouse Yard, in the City of London, Solicitor, for an invention for—"Improvements in the manufacture of coffins."—*A communication from abroad by John R. Cannon, of New Albany, in the United States of America.* *Complete specification; Letters Patent sealed.*

NICKOLS. 14th February 1860.

397. DANIEL NICKOLS, of the City of Manchester, in the County of Lancaster, Engineer, for an invention for—"Improvements in machinery or apparatus for separating the fur from the skins of certain animals." *Provisional protection only.*

LEACH.
CLAYTON.
14th February 1860.

398. JOHN LEACH, of Rochdale, and THOMAS CLAYTON, of the City of Manchester, both in the County of Lancaster, Engineers, for an invention for—"Improvements in pressing, ornamenting, and finishing woollen and other fabrics, and in the machinery or apparatus employed therein." *Letters Patent sealed.*

LEATHAM.
14th February 1860.

399. WILLIAM LEATHAM, of Leeds, in the County of York, Engineer, for an invention for—"Improvements in the means or apparatus for governing steam-engines." *Letters Patent sealed.*

WORTS.
14th February 1860.

400. JAMES KING WORTS, of Colchester, in the County of Essex, Tailor, for an invention for—"Improvements in means or apparatus for obtaining motive-power." *Provisional protection only.*

HUNTER.
14th February 1860.

401. WILLIAM HUNTER, of 30, Sussex Place, Kensington, in the County of Middlesex, for an invention for—"Improvements in apparatus for measuring and regulating the flow of gas as applied to compensating gas meters." *Letters Patent sealed.*

NEWTON.
14th February 1860.

402. WILLIAM EDWARD NEWTON, of the Office for Patents, 66, Chancery Lane, in the County of Middlesex, Civil Engineer, for an invention for—"Improved apparatus for producing an artificial draft in chimnies, and for purposes of ventilation."—*A communication from abroad by George Colhoun, of Philadelphia, in the United States of America.* *Letters Patent sealed.*

MOUILLARD.
14th February 1860.

403. PIERRE LOUIS RÉNÉ MOUILLARD, of Bell Yard, Doctors Commons, in the City of London, Gentleman, for an invention for—"An improvement in the manufacture of metal chains and chain cables." *Provisional protection only.*

ARNOLD.
14th February 1860.

404. JOSEPH ARNOLD, of the Leys, Tamworth, in the County of Stafford, for an invention for—"Improvements in the treatment of sewage matters for the manufacture of manure, and in the apparatus for the same." *Provisional protection only.*

DAVIS.
14th February 1860.

405. WILLIAM DAVIS, of 48, Bankside, in the County of Surrey, Gentleman, for an invention for—"Improvements in the manufacture of bread and in apparatus applicable for the same." *Letters Patent sealed.*

HAINES.
14th February 1860.

406. MICHAEL JOHN HAINES, of Stroud, in the County of Gloucester, for an invention for—"Improvements in the manufacture of driving straps." *Letters Patent sealed.*

BOUSFIELD.
14th February 1860.

407. GEORGE TOMLINSON BOUSFIELD, of Loughborough Park, Brixton, in the County of Surrey, for an invention for—"Improvements in apparatus for separating impurities from grain."—*A communication from abroad by A. H. Dixon, residing at 171, Pearl Street, New York, U. S. of America.* *Provisional protection only.*

ROWBOTHAM.
BOLTON.
14th February 1860.

408. SAMUEL ROWBOTHAM, of Putney, in the County of Surrey, Doctor of Medicine, and GEORGE HARRISON BOLTON, of Penketh, near Warrington, in the County of Lancaster, for an invention for—"A composite soap." *Letters Patent sealed.*

WEEKS.
14th February 1860.

409. JOHN WEEKS, of Marylebone, in the County of Middlesex, Silk Mercer, for an invention for—"Improvements in umbrellas and parasols." *Letters Patent sealed.*

PERCY.
15th February 1860.

410. WILLIAM CARTER STAFFORD PERCY, of the City of Manchester, in the County of Lancaster, Machinist, for an invention for—"Improvements in arrangements and mechanism or apparatus for the manufacture of bricks, tiles, pipes, and other articles formed of plastic materials." *Provisional protection only.*

MORRISON.
15th February 1860.

411. ROBERT MORRISON, of the Town and County of the Town of Newcastle-upon-Tyne, Engineer, for an invention for—"Improvements in marine steam-engines and boilers." *Provisional protection only.*

RONALD.
15th February 1860.

412. JAMES RONALD, of Liverpool, in the County of Lancaster, Merchant, for an invention for—"Improvements in machinery for 'topping up,' 'forming,' or 'laying twine,' lines, cables, and other cordage." *Letters Patent sealed.*

WHIGHT.
15th February 1860.

413. GEORGE WHIGHT, of Ipswich, in the County of Suffolk, Surveyor, for an invention for—"Improvements in winnowing and dressing machines."—*A communication from abroad by David Elon Nocton, of Toronto, Canada, Machinist.* *Letters Patent sealed.*

NUTHALL. 15th February 1860.

414. WILLIAM FROST NUTHALL, of North Lodge, Kilburn, in the County of Middlesex, a Major in Her Majesty's Bengal Army, for an invention for—"An improved portable machine for correcting and boring rifle bullets, also for turning-in shot cartridge cases." *Provisional protection only.*

ALLEN. 15th February 1860.

415. THOMAS ALLEN, of Little Smith Street, Westminster, in the County of Middlesex, Builder, for an invention for—"Improvements in window sashes." *Letters Patent sealed.*

BROOMAN. 15th February 1860.

416. RICHARD ARCHIBALD BROOMAN, of 166, Fleet Street, in the City of London, Patent Agent, for an invention for—"Improvements in the manufacture of fabrics suitable for carpets, hangings, furniture stuffs and the like."—*A communication from abroad by Bernard Landwerlin, of Dornach, near Mulhouse, and Theodore Dopff, of Mulhouse, France.* *Provisional protection only.*

BONELLI. 15th February 1860.

417. GAETANO BONELLI, of Milan, in the Kingdom of Lombardy, Gentleman, for an invention for—"Improvements in machinery for weaving figured fabrics." *Letters Patent sealed.*

HAMILTON. SILVER. 15th February 1860.

418. JOHN HAMILTON, of Glasgow, in the County of Lanark, North Britain, Engineer, and THOMAS SILVER, of Philadelphia, in the United States of America, Gentleman, for an invention for—"Improvements in marine steam-engines." *Letters Patent sealed.*

JENNINGS. 15th February 1860.

419. JOSIAH GEORGE JENNINGS, of Holland Street, Blackfriars, in the County of Surrey, Sanitary Engineer, for an invention for—"Improvements in waterclosets, urinals, and lavatories." *Letters Patent sealed and specification filed by order.*

CAPLEN. 16th February 1860.

420. EDWIN CAPLEN, of Islington, in the County of Middlesex, Engineer, for an invention for—"An improvement in the construction of soles and heels for boots, shoes, and other coverings for the feet." *Letters Patent sealed.*

SPRYE. 16th February 1860.

421. COURTENAY SPRYE, of Saint Leonards-on-Sea, in the County of Sussex, for an invention for—"An improved self-feeding apparatus for printing-machines." *Letters Patent sealed; no specification filed.*

GREEN. 16th February 1860.

422. THOMAS GREEN, of No. 2, Nicholas Lane, London, in the County of Middlesex, Merchant, for an invention for—"An improved machine for the manufacture of paper and other bags."—*A communication to him from abroad by Leon de Parienté, of Paris, in the Empire of France.* *Letters Patent sealed.*

PARSONS. 16th February 1860.

423. GEORGE PARSONS, of Martock, in the County of Somerset, Engineer, for an invention for—"Improvements in steam-engines." *Letters Patent sealed.*

ELKIN. 16th February 1860.

424. WILLIAM HENRY ELKIN, residing at No. 27, Belvedere Road, in the Parish of Saint Mary, Lambeth, in the County of Surrey, Joiner, for an invention for—"Improvements in window frames and sashes." *Letters Patent sealed.*

COWDERY. 16th February 1860.

425. GEORGE COWDERY, of Strood, in the County of Kent, Civil Engineer, for an invention for—"An improved brick-making machine." *Letters Patent sealed.*

CLARK. 16th February 1860.

426. WILLIAM CLARK, of 53, Chancery Lane, in the County of Middlesex, Engineer and Patent Agent, for an invention for—"Improvements in the manufacture of gas and in apparatus for the same."—*A communication to him from abroad by Mr. Etienne Charles Zacherie Bouchard, Civil Engineer, of Paris.* *Letters Patent sealed.*

CLARK. 16th February 1860.

427. WILLIAM CLARK, of 53, Chancery Lane, in the County of Middlesex, Engineer and Patent Agent, for an invention for—"Improvements in sword and other sheaths or scabbards."—*A communication to him from abroad by Mr. Jean Baptiste Adolphe Jay, of 29, Boulevart St. Martin, Paris.* *Provisional protection only.*

WIDNELL. 16th February 1860.

428. HENRY WIDNELL, of Lasswade, County of Edinburgh, Scotland, for an invention for—"Improvements in the manufacture of embossed cut pile fabrics." *Letters Patent sealed.*

HOPKINSON. 16th February 1860.

429. JOHN HOPKINSON, of 14, New North Street, Finsbury, for an invention for—"Improvements in machinery for cutting paper." *Letters Patent sealed.*

JOHNSON. 17th February 1860.

430. JOHN HENRY JOHNSON, of 47, Lincoln's Inn Fields, in the County of Middlesex, and of 166, Buchanan Street, in the City of Glasgow, North Britain, Gentleman, for an invention for—"Improvements in fire-arms."—*A communication to him from abroad by Eugene Lefancheux, of Paris, in the Empire of France, Fire-arm Manufacturer.* *Letters Patent sealed.*

JOHNSON. 17th February 1860.

431. JOHN HENRY JOHNSON, of 47, Lincoln's Inn Fields, in the County of Middlesex, and of 166, Buchanan Street, in the City of Glasgow, North Britain, Gentleman, for an invention for—"Improvements in furnaces for the prevention of smoke."—*A communication to him from abroad by Jules Poivret, of Paris, in the Empire of France, Manufacturer.* *Letters Patent sealed.*

HUDSON. CATLOW. 17th February 1860.

432. WILLIAM HUDSON, of Burnley, in the County of Lancaster, Machinist, and CHRISTOPHER CATLOW, of the same place, Overlooker, for an invention for—"Certain improvements in power-looms for weaving." *Provisional protection only.*

GEORGE. 17th February 1860.

433. JAMES GEORGE, of Birmingham, in the County of Warwick, Jeweller, for an invention for—"A new or improved method of suspending gas and other chandeliers." *Provisional protection only.*

WESTWOOD. 17th February 1860.

434. EDWARD WESTWOOD, of Brierley Hill, in the County of Stafford, Glass Bottle and Stoneware Manufacturer, for an invention for—"An improved mode of securing or holding corks in the necks of bottles, jars, or other similar vessels." *Letters Patent sealed.*

BELPAIRE. 17th February 1860.

435. ALFRED BELPAIRE, Civil Engineer, of the City of Brussels, in the Kingdom of Belgium, for an invention for—"Improvements in fire boxes and other parts of locomotive and moveable steam-engines." *Letters Patent sealed.*

BURY. 17th February 1860.

436. SAMUEL BURY, of Manchester, in the County of Lancaster, Manager, for an invention for—"Improvements in machinery or apparatus for embossing and finishing textile fabrics or other like surfaces." *Letters Patent sealed.*

MORRELL. 17th February 1860.

437. THOMAS HENRY MORRELL, of Leyland, in the County of Lancaster, Brick and Tile Manufacturer, for an invention for—"Improvements in apparatus used in moulding and pressing bricks, and in drying bricks, tiles, and other articles made from plastic earths." *Letters Patent sealed.*

JOHNSON. 17th February 1860.

438. JOHN HENRY JOHNSON, of 47, Lincoln's Inn Fields, in the County of Middlesex, and of 166, Buchanan Street, in the City of Glasgow, North Britain, Gentleman, for an invention for—"Improvements in machinery or apparatus for twisting, doubling, and winding thread."—*A communication to him from abroad by Auguste Prouvost, of Paris, in the Empire of France, Spinner.* *Letters Patent sealed.*

FILOPANTI. 17th February 1860.

439. QUIRICUS FILOPANTI, of Bologna, resident at 26, University Street, London, for an invention for—"An apparatus for storing up the motive-power of cheap or costless forces, and carrying their useful effects where no such cheap or costless moving powers could be applied." *Provisional protection only.*

CUNNINGHAM. 17th February 1860.

440. HENRY DUNCAN PRESTON CUNNINGHAM, of Bury, in the County of Hants, Esquire, for an invention for—"Improvements in reefing sails." *Letters Patent sealed.*

WOODCOCK. 17th February 1860.

441. WILLIAM WOODCOCK, of No. 5, Bessborough Gardens, Pimlico, in the County of Middlesex, for an invention for—"Improvements in stoves." *Letters Patent sealed.*

IRONS. 17th February 1860.

442. DAVID IRONS, of No. 31, Hamilton Street, Deptford, in the County of Kent, Master Mariner, for an invention for—"Improvements in ships' compasses." *Letters Patent sealed.*

HENRY. 17th February 1860.

443. JOHN HENRY, of Mitchell Street, Glasgow, in the County of Lanark, Manufacturer, for an invention for—"Improvements in the manufacture of flounced dresses." *Provisional protection only.*

MAUDE. TINDALL. 17th February 1860.

444. JAMES MAUDE, and LORENZO TINDALL, of Sherwood Iron Works, Mansfield, in the County of Nottingham, for an invention for—"A combined garden roller and seat." *Letters Patent sealed.*

LAVENAS. 17th February 1860.

445. PIERRE LAVENAS, of Lyons, in the Empire of France, for an invention for—"Improvements in obtaining motive-power by compressed air and by its successive and ascending pressures, and in apparatus employed therein."—*A communication to him from abroad by Louis Brunier, of 74, Rue de la Charité, Lyons.* *Letters Patent sealed.*

GILLIS. 18th February 1860.

446. PIERRE ADOLPHE GILLIS, of Braine-le-Comte, in the Kingdom of Belgium, Machine Builder, for an invention for—"An improved regulator for prime mover engines." *Letters Patent sealed.*

DULOS.
18th February 1860.

447. PIERRE EDELESTAN STANISLAS DULOS, of No. 60, Boulevart de Strasbourg, Paris, Metallic Plates Engraver, for an invention for—"Improved process for engraving metallic surfaces either in relief or sunk lines, applicable to copper plate presses or to ordinary printing presses." *Letters Patent sealed.*

LUIS.
18th February 1860.

448. JOSÉ LUIS, of the British and Foreign Office for Patents, No. 1B, Welbeck Street, Cavendish Square, in the County of Middlesex, Patent Agent, for an invention for—"An improved jointed blind."—*A communication to him from abroad by A. E. Tardy, of Paris, in the Empire of France.* *Provisional protection only.*

BEWLEY.
18th February 1860.

449. RICHARD BEWLEY, Junior, of Brook House Foundry, Uttoxeter, in the County of Stafford, for an invention for—"Improvements in the mode of heating the drying rooms, sheds or stories used by potters and manufacturers of bricks and tiles." *Provisional protection only.*

SANDERS.
18th February 1860.

450. JOHN SANDERS, of West Bar, Sheffield, in the County of York, Watch Maker, for an invention for—"Certain improvements in watches." *Letters Patent sealed.*

HENRY.
18th February 1860.

451. MICHAEL HENRY, of 84, Fleet Street, in the City of London, Patent Agent, for an invention for—"Improvements in the production of gas for lighting and heating, and in apparatus employed therein."—*A communication to him from abroad by Louis Cyrille Bureau, of 33, Boulevard St. Martin, Paris, France.* *Letters Patent sealed.*

NEWTON.
18th February 1860.

452. WILLIAM EDWARD NEWTON, of the Office for Patents, 66, Chancery Lane, in the County of Middlesex, Civil Engineer, for an invention for—"Certain improvements in knitting-machines."—*A communication to him from abroad by William Henry McNary, of Brooklyn, in the State of New York, and James Green Wilson, of the City of New York, both in the United States of America.* *Letters Patent sealed.*

WINTER.
18th February 1860.

453. EDWARD WINTER, of New Oxford Street, in the County of Middlesex, for an invention for—"Certain improvements in library and office tables." *Provisional protection only.*

OSBORNE.
20th February 1860.

454. THOMAS OSBORNE, of Derby, in the County of Derby, Engineer, for an invention for—"Improvements in coupling and uncoupling railway and other vehicles." *Letters Patent sealed.*

EARNSHAW.
GREEN.
20th February 1860.

455. JOSEPH EARNSHAW, Bobbin Turner, and WILLIAM GREEN, Shuttle Maker, both of Preston, in the County of Lancaster, for an invention for—"Improvements in machinery for forming blocks of wood into shape to be used as soles for boots, shoes, or clogs, or for other purposes." *Provisional protection only.*

MOFFAT.
20th February 1860.

456. JOHN MOFFAT, of Ardrossan, in the County of Ayr, North Britain, Civil Engineer, for an invention for—"Improvements in steam-boiler furnaces." *Provisional protection only.*

TEISSERE.
20th February 1860.

457. ALEXANDRE TEISSERE, of 29, Boulevart St. Martin, Paris, in the Empire of France, Merchant, for an invention for—"An improved blank stamping press." *Letters Patent sealed.*

NEWTON.
20th February 1860.

458. WILLIAM EDWARD NEWTON, of the Office for Patents, 66, Chancery Lane, in the County of Middlesex, Civil Engineer, for an invention for—"A new and useful improvement in the smelting and refining of iron."—*A communication to him from abroad by John Black Cornell, William Wiggins Cornell, & Birdsall Cornell, all of the City of New York.* *Provisional protection only.*

HOYLE.
20th February 1860.

459. THOMAS HOYLE, of Marsden, in the Parish of Almondbury, in the County of York, Corn Miller, for an invention for—"Improvements in the construction of screens employed for cleaning wheat and other grain." *Letters Patent sealed.*

HILL.
MORGAN.
20th February 1860.

460. ALFRED CLAYTON HILL, Manager, and WILLIAM MORGAN, Analytical Chemist, both of Witton Park Iron Works, near Darlington, for an invention for—"Improvements in protecting the sides and ends of puddling furnaces." *Letters Patent sealed.*

MART.
20th February 1860.

461. FREDERICK WILLIAM MART, of 11, Gresham Street West, E.C., for an invention for—"Improvements in the manufacture of mops or 'sponges' for cleansing cannon." *Letters Patent sealed.*

SOWERBY. NEVILLE. 20th February 1860.

462. JOHN SOWERBY, and SAMUEL NEVILLE, of Gateshead, in the County of Durham, Glass Manufacturers, for an invention for—"An improvement in moulds for making pressed glass." *Provisional protection only.*

BROOMAN. 20th February 1860.

463. RICHARD ARCHIBALD BROOMAN, of 166, Fleet Street, in the City of London, Patent Agent for an invention for—"Improvements in stamping presses."—*A communication to him from abroad by Theophile Canier, and Adolphe Kunkler, of Paris.* *Letters Patent sealed.*

TOWNSEND. 20th February 1860.

464. G. W. TOWNSEND, of Calcutta, Civil Engineer, for an invention for—"An improvement in projectiles." *Letters Patent sealed; no specification filed.*

BRIGHT. 20th February 1860.

465. Sir CHARLES TILSTON BRIGHT, of Harrow Weald, in the County of Middlesex, for an invention for—"Improvements in working and testing telegraphic conductors, and in apparatus connected therewith." *Letters Patent sealed.*

LEROUX. 21st February 1860.

466. JEAN FRANÇOIS FÉLIX LEROUX, of No. 44, Rue Volta, Paris, in the Empire of France, for an invention for—"An apparatus for facilitating the collection of money on counters." *Provisional protection only.*

WEERTS. 21st February 1860.

467. PIERRE JULIEN WEERTS, of Verviers, in the Kingdom of Belgium, and 4, South Street, Finsbury, London, for an invention for—"Improvements in the preparation of stuffs in general." *Letters Patent sealed.*

DERHAM. 21st February 1860.

468. RICHARD JONES DERHAM, of No. 46, Redcliff Street, Bristol, for an invention for—"Improvements in butter churns." *Provisional protection only.*

SAUTTER. 21st February 1860.

469. LOUIS SAUTTER, Manager of the firm of Louis Sautter & Co., of No. 37, Avenue Montaigne, Paris, Engineer, for an invention for—"Improvements in the treatment of mica and its application to the Manufacture of reflectors and to other uses." *Provisional protection only.*

JACKSON. 21st February 1860.

470. THOMAS JACKSON, of 21, Orchard Street, Portman Square, W., for an invention for—"Improvements in the action of upright piano fortes." *Provisional protection only.*

KEIGHLEY. 21st February 1860.

471. SUGDEN KEIGHLEY, of Keighley, in the County of York, for an invention for—"The employment of a certain fibre in the manufacture of textile fabrics not hitherto used for this purpose." *Provisional protection NOT granted.*

LEMOINE. 22nd February 1860.

472. FRANÇOIS HYPOLITE LEMOINE, of 47, Howland Street, Fitzroy Square, London, for an invention for—"Improvements in the manufacture of waterproof--papers and paste boards of every description." *Letters Patent sealed.*

CRISPIN. 22nd February 1860.

473. WILLIAM HENRY CRISPIN, of Marsh Gate Lane, Stratford, in the County of Essex, Copper Smelter, for an invention for—"Improvements in fastenings for doors." *Provisional protection only.*

GREVES. 22nd February 1860.

474. CHARLES GREVES, of Birmingham, in the County of Warwick, for an invention for—"Improvements in fire-arms." *Provisional protection only.*

SCHIELE. 22nd February 1860.

475. CHRISTIAN SCHIELE, of Lower Bebbington, in the County of Cheshire, for an invention for—"Improvements in machinery for hammering, crushing, reducing, cutting, and mixing." *Letters Patent sealed.*

NEWTON. 22nd February 1860.

476. WILLIAM EDWARD NEWTON, of the Office for Patents, 66, Chancery Lane, in the County of Middlesex, Civil Engineer, for an invention for—"Improvements in digestors for dissolving quartzose rocks."—*A communication to him from abroad by Timothy Hill Lang, of the City of New York, in the United States of America, Machinist.* *Letters Patent sealed.*

LECOUPEUR. 22nd February 1860.

477. VICTOR EUGÈNE LECOUPEUR, of Rouen, in the Empire of France, for an invention for—"A new or improved system of filter." *Letters Patent sealed.*

DAVISON. 22nd February 1860.

478. ROBERT DAVISON, of London Street, in the City of London, Civil Engineer, for an invention for—"An improvement in boiling worts and other liquids." *Provisional protection only.*

SYMONS. 22nd February 1860.

479. WILLIAM SYMONS, of Dunster, in the County of Somerset, Gentleman, for an invention for—"An improvement in self-registering thermometers." *Provisional protection only.*

BATESON. 22nd February 1860.

480. SAMUEL STEPHEN BATESON, of Bolton Street, May Fair, in the County of Middlesex, Barrister at Law, for an ivnention for—"Improvements in generating steam, and in heating apparatus, and in the apparatus employed therein." *Letters Patent sealed.*

LOVELIDGE. 22nd February 1860.	481. THOMAS LOVELIDGE, of Philadelphia, State of Pennsylvania, United States of America, Manufacturer of Hosiery, for an invention for—"Improvements in looms for weaving." *Letters Patent sealed.*
WILKINSON. 22nd February 1860.	482. EDWARD WILKINSON, of Grimesthorpe, nr Sheffield, in the County of York, Sheep Shear Manufacturer, for an invention for—"Improvements in sheep-shears." *Provisional protection only.*
REYNOLDS. 22nd February 1860.	483. EDWARD DUNKLEY REYNOLDS, of Southville, Bedminster, in the City and County of Bristol, for an invention for—"An improved rifle ball."—*A communication to him from abroad by William Stow, of Utica, Oneida Co., State of N.Y., North America.* *Provisional protection only.*
TUCK. 22nd February 1860.	484. JOSEPH HENRY TUCK, of Great George Street, Westminster, for an invention for—"Improvements in the manufacture of cylinders, tubes, and other hollow bodies." *Letters Patent sealed.*
DUJARDIN. 23rd February 1860.	485. PIERRE ANTOINE JOSEPH DUJARDIN, of Lille, a Town of France, Physician, for an invention for—"Improvements in printing-telegraphs." *Letters Patent sealed.*
MAPPLE. 23rd February 1860.	486. DANIEL MOORE MAPPLE, of No. 1, Clark's Place, Bishopgate Street Within, in the City of London, Middlesex, for an invention for—"Improvements in electric clocks and electric batteries." *Provisional protection only.*
BARLOW. 23rd February 1860.	487. THOMAS BARLOW, of Hill Top, West Bromwich, in the County of Stafford, Oil Merchant, for an invention for—"A new or improved rail for railways." *Provisional protection only.*
HAYNES. 23rd February 1860.	488. WILLIAM HAYNES, of Bank Place, Holywell, in the County of Flint, Metallurgist, for an invention for—"Improvements in obtaining metals from their ores or matrices." *Letters Patent sealed.*
CHARLESWORTH. CHARLESWORTH. DUNBAR. 23rd February 1860.	489. WILLIAM CHARLESWORTH, of Union Street, Southwark, in the County of Surrey, and HENRY CHARLESWORTH, of No. 36, Barbican, in the City of London, and THOMAS HENRY DUNBAR, of Clerkenwell, in the County of Middlesex, for an invention for—"Improvements in cigarettes." *Letters Patent sealed.*
BOTTOMLEY. 23rd February 1860.	490. JOHN BOTTOMLEY, of Laister Dyke, near Bradford, in the County of York, General Agent, for an invention for—"Improvements in means or apparatus used in spinning fibrous substances." *Provisional protection only.*
NUTHALL. HUMFREY. 23rd February 1860.	491. WILLIAM FROST NUTHALL, of North Lodge, Kilburn, in the County of Middlesex, a Major in Her Majesty's Bengal Army, and CHARLES HUMFREY, of Southwark, in the County of Surrey, Oil Merchant, for an invention for—"An improved lubricant for small-arms and ordnance ammunition." *Provisional protection only.*
GILBERT. 23rd February 1860.	492. SAMUEL GILBERT, of Coleorton, near Ashby-de-la-Zouch, in the County of Leicester, for an invention for—"A new machine for excavating sewers, tunnels and other such like under-ground work." *Provisional protection only.*
BROOMAN. 23rd February 1860.	493. RICHARD ARCHIBALD BROOMAN, of 166, Fleet Street, in the City of London, Patent Agent, for an invention for—"An improved method of producing documents suitable for bank notes and other instruments of value, in order to prevent forgery thereof."—*A communication to him from abroad by Leopold Eidlitz, of New York.* *Letters Patent sealed.*
PEGG. 23rd February 1860.	494. JOHN PEGG, of Leicester, Elastic Web Manufacturer, for an invention for—"Improvements in battens employed in weaving." *Letters Patent sealed.*
REDFERN. 23rd February 1860.	495. JOHN REDFERN, of Cumberland Road, Southsea, Portsmouth, in the County of Hants, for an invention for—"Improvements in the construction of steam-boilers for increasing the durability thereof and also for economizing fuel." *Letters Patent sealed.*
LEVISOHN. 23rd February 1860.	496. LIPPMANN JACOB LEVISOHN, of 18, Helmet Row, in the Parish of Saint Luke, and County of Middlesex, Manufacturer, for an invention for—"An improvement in porte-monnaies and certain other portable receptacles." *Provisional protection only.*

BOISSAU.
24th February 1860.

497. FRANÇOIS BOISSAU, of Montigny-sur-Sambre, in the Kingdom of Belgium, and 4, South Street, Finsbury, London, for an invention for—"Improvements in apparatus for the extraction of pit coal and other mineral products."
Letters Patent sealed.

DEAN.
KNOWLES.
KNOWLES.
24th February 1860.

498. THOMAS DEAN, JAMES KNOWLES, and THOMAS KNOWLES, of the City of Manchester, in the County of Lancaster, Engineers, for an invention for—"Improvements in machinery or apparatus for obtaining motive-power."
Provisional protection only.

MUCKLOW.
24th February 1860.

499. EDWARD MUCKLOW, of Bury, in the County of Lancaster, Manufacturing Chemist, for an invention for—"Certain improvements in the treatment of madder-roots, munjeet or other plants of a similar class." *Letters Patent sealed.*

ROBERTS.
24th February 1860.

500. SAMUEL ROBERTS, of Hull, in the County of York, Smith, for an invention for—"Improvements in steam-engines." *Letters Patent sealed.*

THOMPSON.
24th February 1860.

501. JAMES THOMPSON, of Bilston, in the County of Stafford, Iron Master, for an invention for—"Improvements in the manufacture of iron, steel-iron, and steel, and in the apparatus to be employed in such manufacture."
Provisional protection only.

HOWELL.
24th February 1860.

502. JOSEPH BENNETT HOWELL, of Sheffield, in the County of York, Steel Manufacturer, for an invention for—"Improvements in casing ships, batteries and other structures, for the purpose of resisting shot, shell, and other projectiles."
Provisional protection only.

SALISBURY.
24th February 1860.

503. ROBERT SALISBURY, of Preston, in the County of Lancaster, Mechanic, for an invention for—"An improved method of adapting sheds and other buildings to the purpose of drying pipes, tiles, bricks, and other articles made from clay or other plastic materials." *Provisional protection only.*

BROOMAN.
24th February 1860.

504. RICHARD ARCHIBALD BROOMAN, of 166, Fleet Street, in the City of London, Patent Agent, for an invention for—"Improvements in quills, spools, or bobbins."—*A communication to him from abroad by Stanislas Vigoureux, of Reims, France.* *Letters Patent sealed.*

BARANOWSKI.
24th February 1860.

505. JEAN JOSEPH BARANOWSKI, of Chalcot Terrace, in the County of Middlesex, Engineer, for an invention for—"Improvements in presses specially adapted to the copying of letters." *Letters Patent sealed.*

WARD.
24th February 1860.

506. SETH WARD, of Battersea, in the County of Surrey, Machinist, for an invention for—"Improvements in sewing-machines." *Letters Patent sealed.*

JOHNSON.
24th February 1860.

507. JOHN HENRY JOHNSON, of 47, Lincoln's Inn Fields, in the County of Middlesex, and of 166, Buchanan Street, in the City of Glasgow, North Britain, Gentleman, for an invention for—"Improvements in the reduction of friction in the working parts of machinery, applicable also the transmission of motive-power."—*A communication to him from abroad by Ferdinand Schwenk, of Vienna, in the Empire of Austria, Engineer.* *Letters Patent sealed.*

JOHNSON.
24th February 1860.

508. JOHN HENRY JOHNSON, of 47, Lincoln's Inn Fields, in the County of Middlesex, and of 166, Buchanan Street, in the City of Glasgow, North Britain, Gentleman, for an invention for—"Improvements in forming the fastenings of caps or stoppers for jars and bottles, and in the machinery or apparatus employed therein."—*A communication to him from abroad by Thomas Rollason Hartell, of the City of Philadelphia, in the State of Pennsylvania, and Andrew K. Hay, of Winslow, in the State of New Jersey, United States of America.* *Letters Patent sealed.*

BARCLAY.
24th February 1860.

509. ANDREW BARCLAY, of Kilmarnock, in the County of Ayr, North Britain, Engineer, for an invention for—"Improvements in pumping-engines."
Provisional protection only.

WETTER.
24th February 1860.

510. CONRAD WETTER, of 67, Myddleton Square, in the County of Middlesex, for an invention for—"Improvements in the manufacture of fermented and spirituous liquors." *Letters Patent sealed.*

WALKER.
24th February 1860.

511. WILLIAM HENRY WALKER, of Leicester, Manufacturer, for an invention for—"Improvements in the manufacture of boots and shoes."
Provisional protection only.

NORTH. 24th February 1860.

512. THOMAS NORTH, of Oxford, in the County of Oxford, Gentleman, for an invention for—"Improved apparatus for receiving and recording votes by ballot." *Letters Patent sealed.*

LIGHTFOOT. 25th February 1860.

513. JOHN LIGHTFOOT, of Accrington, in the County of Lancaster, Chemist, for an invention for—"Improvements in fixing pigments and other coloring matters on textile fabrics and yarns." *Letters Patent sealed.*

HUGHES. 25th February 1860.

514. EDWARD THOMAS]HUGHES, of the firm of Hughes and Son, Patent Agents, 123, Chancery Lane, London, W.C., for an invention for—"Improvements in boring apparatus."—*A communication to him from abroad by George Kolb, Director of the Boring Company, Bayreuth, in the Kingdom of Bavaria.* *Letters Patent sealed.*

ANNABLE. BLENCH. 25th February 1860.

515. BENJAMIN ANNABLE, & JOHN BLENCH, of Newcastle Street, Farringdon Street, in the City of London, Millwrights, Engineers and Printing Machine Makers, for an invention for—"Improvements in printing machines, rendering the same more compact, of less bulk and more available for use." *Letters Patent sealed.*

GILLESPIE. GILLESPIE. 25th February 1860.

516. JAMES GILLESPIE, and JOHN GILLESPIE, of Kingsbarns, in the County of Fife, North Britain, Agricultural Engineers and Implement Makers, for an invention for—"Improvements in reaping and mowing machines." *Letters Patent sealed.*

DEAN. PEACH. 25th February 1860.

517. WILLIAM DEAN, of Derby, in the County of Derby, Weaver, and CHARLES PEACH, of Derby, in the County of Derby, Weaver, for an invention for—"An improvement in the manufacture of wreaths or trimmings for ladies' bonnets and other articles of dress." *Provisional protection only.*

DENTON. 25th February 1860.

518. HENRY RICHARD JOHN DENTON, of Leicester, in the County of Leicester, for an invention for—"Improvements in hay rakes, horse rakes and similar agricultural implements." *Provisional protection only.*

SIEMENS. 25th February 1860.

519. CHARLES WILLIAM SIEMENS, of Great George Street, Westminster, in the County of Middlesex, for an invention for—"Improvements in the construction of electric telegraph cables and conductors, and in machinery connected therewith." *Letters Patent sealed.*

SCOTT. 25th February 1860.

520. EBENEZER ERSKINE SCOTT, of Dundee, in the County of Forfar, in Scotland, Actuary and Accountant, for an invention for—"Improvements in and pertaining to breech-loading guns and fire-arms." *Provisional protection only.*

LAMBERT. WAKEFIELD. 25th February 1860.

521. THOMAS LAMBERT, of Short Street, New Cut, and OBED WAKEFIELD, of Union Place, Lambeth, both in the County of Surrey, for an invention for—"Improvements in steam and other valves or cocks." *Letters Patent sealed.*

JENKINS. 25th February 1860.

522. GEORGE JENKINS, of Tyne Cottage, Hanwell, in the County of Middlesex, for an invention for—"Improvements in children's metal cots or bedsteads." *Letters Patent sealed.*

BOYD. 25th February 1860.

523. JAMES EDWARD BOYD, of Hither Green, Lewisham, in the County of Kent, Gentleman, for an invention for—"Improvements in and transmitting motive-power from certain parts to certain other parts of lawn mowing, grass cutting and other agricultural, horticultural and farming machines." *Letters Patent sealed.*

GREEN. GREEN. 25th February 1860.

524. CHARLES EDMUND GREEN, of 13, Blandford Street, Portman Square, and JOHN GREEN, of Charlotte Street, Portland Place, in the Parish of Saint Marylebone, in the County of Middlesex, for an invention for—"Improvements in breech-loading fire-arms." *Provisional protection only.*

VARLEY. 25th February 1860.

525. SAMUEL VARLEY, of Birmingham, in the County of Warwick, Engineer, for an invention for—"A new or improved chain and machinery to be employed in the manufacture of the said chain." *Provisional protection only.*

LANG. CHEVALIER. 25th February 1860.

526. JOHN LANG, and CHARLES CHEVALIER, of the Submarine Telegraph Works, Birkenhead, for an invention for—"Improvements in targets." *Letters Patent sealed.*

SILVER. HAMILTON. 25th February 1860.

527. THOMAS SILVER, of Philadelphia, U.S., Gentleman, and JOHN HAMILTON, of Glasgow, Engineer, for an invention for—"Improvements in apparatus for governing or regulating the speed of steam and other engines and machines in motion." *Letters Patent sealed.*

BIRKS.
BIRKS.
25th February 1860.

528. WILLIAM BIRKS, Senr., and WILLIAM BIRKS, Junr., both of Nottingham, in the County of Nottingham, Machinists, for an invention for—"Improvements in machinery for the manufacture of bobbin net or twist lace." *Letters Patent sealed.*

LEE.
25th February 1860.

529. JOSEPH LEE, of the City of Lincoln, for an invention for—"Improvements in the manufacturing of crank shafts from round or square iron or steel." *Letters Patent sealed.*

FONROBERT.
25th February 1860.

530. CHARLES FRANÇOIS JULES FONROBERT, of Berlin, in Prussia, for an invention for—"Improvements in gilding and silvering silk and other fibrous substances."—*A communication to him from abroad by Mrs. Müller, residing at Berlin, in Prussia.* *Letters Patent sealed.*

FABER.
25th February 1860.

531. JOHANN FABER, trading under the style or firm of Anton Wilhelm Faber, of Stein, near Nuremberg, for an invention for—"Improvements in ever pointed pencil cases." *Letters Patent sealed.*

ROWCLIFFE.
27th February 1860.

532. JOHN BARNOUIN ROWCLIFFE, of the firm of John B. Rowcliffe and Company, Ducie Works, in the City of Manchester, Small Ware Manufacturers, for an invention for—"Improvements in pin winding machinery." *Provisional protection only.*

LOWNDES.
GILROY.
27th February 1860.

533. ROBERT GILLIES LOWNDES, and JAMES GILROY, of Auldhousefield, in the County of Renfrew, North Britain, Finishers, for an invention for—"Improvements in embossing and finishing woven fabrics." *Provisional protection only*

MELVILLE.
27th February 1860.

534. ALEXANDER MELVILLE, of No. 54, George Street, Portman Square, in the County of Middlesex, Artist, for an invention for—"Improvements in the preparation and manufacture of compounds for marking on paper and other fabrics and substances." *Letters Patent sealed.*

COOLEY.
27th February 1860.

535. ROBERT BARLOW COOLEY, of Nottingham, in the County of Nottingham, Hat Manufacturer, for an invention for—"Improvements in the manufacture of plain or ornamental woven or looped fabrics from certain descriptions of yarn, and for the application of such fabrics to the making of various articles of dress and for other uses, such as hats, caps, gloves, hosiery, lace, shawls, mantle and other cloths, curtains, table, umbrella and other covers, such fabrics being made with or without terry plush or cut pile surfaces." *Letters Patent sealed.*

EASTWOOD.
27th February 1860.

536. THOMAS CHARLES EASTWOOD, of Bradford, in the County of York, Woolcomber, for an invention for—"Improvements in means or apparatus for preparing and combing wool, cotton and other fibres." *Provisional protection only.*

DESVIGNES.
27th February 1860.

537. PETER HUBERT DESVIGNES, of Lewisham, in the County of Kent, Gentleman, for an invention for—"Improvements in apparatuses for exhibiting photographic, stereoscopic and other pictures, models, figures, and designs." *Letters Patent sealed.*

SHORE.
27th February 1860.

538. SYDNEY FOYE SHORE, of Clifton Hall, in the County of Derby, Gentleman, for an invention for—"An improvement in or addition to casks to prevent their becoming foul." *Letters Patent sealed.*

BASSETT.
27th February 1860.

539. JOHN ALLEN BASSETT, of Salem, Massachusetts, United States of America, for an invention for—"Improvements in apparatus for decomposing steam." *Provisional protection only.*

MUNSLOW.
WALLWORK.
27th February 1860.

540. WILLIAM MUNSLOW, and HENRY WALLWORK, of Miles Platting, near Manchester, in the County of Lancaster, Ironfounders, for an invention for—"Improvements in weighting and clearing rollers used in machinery for preparing and spinning cotton and other fibrous materials." *Letters Patent sealed.*

BASSETT.
27th February 1860.

541. JOHN ALLEN BASSETT, of Salem, Massachusetts, in the United States of America, for an invention for—"Improvements in the manufacture of gas for illuminating and other purposes." *Provisional protection only.*

WALKER.
28th February 1860.

542. ROBERT WALKER, of Eccleston, near Prescot, in the County of Lancaster, Colliery Viewer, for an invention for—"Improvements in apparatus for preventing accidents in winding from mines, which apparatus is also applicable for other similar purposes." *Letters Patent sealed.*

ASSER.
28th February 1860.

543. EDOUARD ISAAC ASSER, of Amsterdam, in the Kingdom of Netherlands, Lawyer, for an invention for—"A process of photographic proofs with printing or autographic ink for the purpose of either using them as such or placing them back on lithographic stones or on metal." *Letters Patent sealed.*

WRIGHT.
28th February 1860.

544. ZACCHEUS WRIGHT, of Upper Wortley, near Leeds, in the County of York, for an invention for—"Improvements in machinery or apparatus for the prevention of accidents in mine shafts, by the breaking of the rope or chain, or disconnection of the drum from the engine, applicable also to other hoisting or lifting machinery or apparatus." *Letters Patent sealed.*

DAVIES.
28th February 1860.

545. WILLIAM DAVIES, of Queen's Road, Everton, near Liverpool, in the County of Lancaster, Builder, for an invention for—"Improvements in moveable window shutters." *Provisional protection only.*

WEIR.
28th February 1860.

546. GEORGE WEIR, of Glasgow, in the County of Lanark, North Britain, Engineer, for an invention for—"Improvements in regulating steam-engines, and in regulating apparatus for steam-engines and other prime movers." *Letters Patent sealed.*

MIDGLEY.
28th February 1860.

547. JAMES WATERHOUSE MIDGLEY, of Keighley, in the County of York, Mechanic, for an invention for—"Improvements in machinery for spinning wool, mohair, alpaca, and other fibrous substances." *Letters Patent sealed.*

HIGGINS.
28th February 1860.

548. HATSEL HIGGINS, of Orleans, of the State of Massachusetts, of the United States of America, for an invention for—"Supporting the fluke of an anchor, and discharging the same from the bulwark rail of a vessel." *Complete specification; Letters Patent sealed.*

MANSON.
28th February 1860.

549. MAGNUS MANSON, of Edinburgh, in the County of Mid Lothian, North Britain, Gas Meter Maker, for an invention for—"Improvements in gas meters." *Letters Patent sealed.*

PARISH.
LANG.
28th February 1860.

550. CORNELIUS PARISH, of Preston, in the County of Lancaster, Engineer, and JOSEPH LANG, of Preston, aforesaid, Overlooker, for an invention for—"Improvements in looms for weaving." *Provisional protection only.*

ANDERSON.
28th February 1860.

551. ALBAN ANDERSON, of Lancaster, State of Ohio, United States of America, for an invention for—"An improvement in governors of motive-power engines." *Letters Patent sealed.*

LYNCH.
TYNAN.
29th February 1860.

552. PATRICK FRANCIS LYNCH, of Liverpool, in the County of Lancaster, Shipping Agent, and JOHN TYNAN, also of Liverpool, aforesaid, French Polisher, for an invention for—"Improvements in the construction of boats, and in the use or application of certain novel arrangements and apparatus thereto." *Provisional protection only.*

BLAIR.
29th February 1860.

553. JOHN BLAIR, of the Caledon Mill, in the City of Manchester, Cotton Dealer, for an invention for—"Certain improvements in machinery for preparing and carding cotton and other fibrous materials." *Provisional protection only.*

HARGREAVES.
HEATON.
29th February 1860.

554. BENJAMIN HARGREAVES, Pattern Maker, and JAMES HEATON, Loom Tackler, both of Habergham Eaves, near Burnley, in the County of Lancaster, for an invention for—"Certain improvements in looms for weaving." *Provisional protection only.*

RICKARD.
RICKARD.
29th February 1860.

555. JOHN RICKARD, of Derby, in the County of Derby, Silk Manufacturer, and WILLIAM RICKARD, of Derby, in the County of Derby, Silk Manufacturer, for an invention for—"Improvements in the manufacture of chenille and other piled fabrics, and also in the machinery connected therewith." *Letters Patent sealed.*

BRYDEN.
BRYDEN.
29th February 1860.

556. JOHN MILLER BRYDEN, and WILLIAM CORBET BRYDEN, of Edinburgh, Glasgow, and Perth, North Britain, Window-blind Makers, for an invention for—"Improvements in mountings for window blinds." *Letters Patent sealed.*

WILLIAMS.
29th February 1860.

557. WILLIAM WILLIAMS, Merthyr Tydvil, Civil Engineer, for an invention for—"Improvements in machinery or apparatus for effecting ventilation." *Letters Patent sealed.*

RANKEN.
29th February 1860.

558. GEORGE RANKEN, of Bathurst, Sydney, New South Wales, for an invention for—"Improvements in paddle wheels." *Letters Patent sealed.*

SWAN.
29th February 1860.

559. HENRY SWAN, of 5, Bishopsgate Street Without, for an invention for—"Improvements in stereoscopes, stereoscopic pictures, and cameras for taking the same." *Letters Patent sealed.*

SCHWAB.
29th February 1860.

560. FREDERICK SCHWAB, of 24, Poland Street, Oxford Street, in the Parish of St. James, and City of Westminster, for an invention for—"Improvements in breech-loading fire-arms." *Provisional protection NOT granted.*

SMYTHIES.
29th February 1860.

561. JOHN KINNERSLEY SMYTHIES, of 27, Kensington Park Gardens, in the Parish of St. Mary Abbotts, Kensington, in the County of Middlesex, Barrister at Law, for an invention for—"A flying engine." *Letters Patent sealed.*

NEWTON.
29th February 1860.

562. WILLIAM EDWARD NEWTON, of the Office for Patents, 66, Chancery Lane, in the County of Middlesex, Civil Engineer, for an invention for—"Improved machinery for making or forming the teeth of combs."—*A communication to him from abroad by William Noyes, Junior, of West Newbury, in the County of Essex, and State of Massachusetts, United States of America.* *Letters Patent sealed.*

WILSON.
29th February 1860.

563. GEORGE WILSON, of the City of York, Glass Manufacturer, for an invention for—"Improved machinery for moulding the caps of bottles and jars." *Provisional protection only.*

COLLYER.
29th February 1860.

564. ROBERT HANHAM COLLYER, of 8, Alpha Road, St. John's Wood, in the County of Middlesex, M.D. and Ph.D., for an invention for—"Improvements in the manufacture of pulp and in preparing materials for the purpose, and in apparatuses employed therein, part of the invention being also applicable to preparing materials for fibrous and textile manufacturing purposes." *Letters Patent sealed.*

DESTAS.
1st March 1860.

565. PIERRE CHARLES DÉSIRÉ DESTAS, of No. 112, Rue de Reuilly, in the City of Paris, Merchant, for an invention for—"A new engine working by wind or water." *Letters Patent sealed.*

KRUTZSCH.
1st March 1860.

566. WILLIAM KRUTZSCH, of Chamber Street, Goodman's Fields, E., Engineer, for an invention for—"Improvements in cartridges and projectiles." *Letters Patent sealed.*

BRITTEN.
1st March 1860.

567. BASHLEY BRITTEN, of Sydenham Hill, Kent, Gentleman, for an invention for—"Improvements in projectiles." *Provisional protection only.*

BUSH.
1st March 1860.

568. WILLIAM BUSH, of Dulwich, in the County of Surrey, Chemist, for an invention for—"Manufacturing granulated seidlitz powder." *Complete specification; Letters Patent sealed.*

CLARK.
1st March 1860.

569. WILLIAM CLARK, of 53, Chancery Lane, in the County of Middlesex, Engineer and Patent Agent, for an invention for—"Improvements in machinery for 'sizing' raw silk or other threads, and for cleaning the same preparatory to the sizing operation."—*A communication to him from abroad by Messrs. John Edwin Atwood, of Mansfield Center, Tolland County, Machinist, and Lewis Leigh, of Seymour, New Haven County, Manufacturer, both in the State of Connecticut, U.S.* *Letters Patent sealed.*

BONNET.
HEID.
1st March 1860.

570. IVE BONNET, and JOHN DANIEL HEID, of Brussels, in the Kingdom of Belgium, Mécanicians, for an invention for—"Improvements in planing-machines for files and other metal objects, straight, curved or otherwise." *Letters Patent sealed.*

MILNES.
1st March 1860.

571. JOHN MILNES, of Gloucester, in the County of Gloucester, Railway Contractor, for an invention for—"An apparatus for exercising the joints and muscles of the human body." *Letters Patent sealed.*

DRIVER.
JESSOP.
1st March 1860.

572. JEREMIAH DRIVER, of Keighley, in the County of York, Iron Founder, and JOSEPH JESSOP, of Bradford, in the same County, Machine Maker, for an invention for—"Improvements in means or apparatus used in washing, wringing and mangling fabrics." *Letters Patent sealed.*

CHADWICK.
FROST.
1st March 1860.

573. DAVID CHADWICK, of Salford, in the County of Lancaster, Gentleman, and HERBERT FROST, of Manchester, in the said County, Engineer, for an invention for—"Improvements in apparatus for measuring water and other liquids." *Letters Patent sealed.*

McCULLOCH. 1st March 1860.

574. JOHN McCULLOCH, of San Francisco, in the United States of America, Analytical Chemist, for an invention for—"Improvements in the reduction of gold, silver and copper ores." *Letters Patent sealed.*

COLLINS. 1st March 1860.

575. JAMES COLLINS, of 28, Bennett Street, Stamford Street, for an invention for—"Improved outside blinds and awnings." *Provisional protection only.*

NASH. 1st March 1860.

576. WILLIAM HENRY NASH, of 3, Matson's Terrace, Kingsland Road, in the County of Middlesex, Engineer, for an invention for—"Improvements in steam-engines." *Letters Patent sealed.*

BLASHFIELD. 1st March 1860.

577. JOHN MARRIOTT BLASHFIELD, of Stamford, in the County of Lincoln, for an invention for—"Improvements in burning pottery and china wares, and in kilns employed for such purposes." *Letters Patent sealed.*

BESSEMER. 1st March 1860.

578. HENRY BESSEMER, of Queen Street Place, New Cannon Street, in the City of London, for an invention for—"Improvements in machinery or apparatus employed in the manufacture of malleable iron and steel." *Letters Patent sealed.*

JOHNSON. 1st March 1860.

579. JOHN HENRY JOHNSON, of 47, Lincoln's Inn Fields, in the County of Middlesex, and of 166, Buchanan Street, in the City of Glasgow, North Britain, Gentleman, for an invention for—"Improvements in gas regulators or governors."—*A communication to him from abroad by Adolphe Christophe, of Paris, in the Empire of France.* *Provisional protection only.*

EDWARDS. 2nd March 1860.

580. GEORGE EDWARDS, of No. 4, Park Road Villas, Battersea, in the County of Surrey, Engineer, for an invention for—"Improvements in caissons and foundations for bridges, piers, and other structures under water." *Letters Patent sealed.*

ALBITES. 2nd March 1860.

581. PIERRE MODESTE TITUS OCTAVE COEN ALBITES, of No. 34, Rue Vivienne in the City of Paris, Photographer, for an invention for—"Improvements in photographic apparatus." *Provisional protection only.*

BABINGTON. 2nd March 1860.

582. BENJAMIN GUY BABINGTON, of George Street, Hanover Square, in the County of Middlesex, M.D., for an invention for—"Improvements in means or apparatus for protecting the throad and chest from atmospheric influences, and which may also be employed as a protection to the mouth." *Provisional protection only.*

D'ARGY. 2nd March 1860.

583. ROLAND D'ARGY, of Blois, in the Empire of France, for an invention for—"Improvements in apparatus for raising water." *Provisional protection only.*

LEWIS. 2nd March 1860.

584. JOSEPH WILLIAM LEWIS, of Coventry, in the County of Warwick, Ribbon Manufacturer, for an invention for—"Improvements in looms for weaving ribbons." *Letters Patent sealed.*

BROOMAN. 2nd March 1860.

585. RICHARD ARCHIBALD BROOMAN, of 166, Fleet Street, in the City of London, Patent Agent, for an invention for—"Improvements in the construction of naves or bosses for wheels."—*A communication to him from abroad by Gustave Hamoir, of Saultain, France.* *Letters Patent sealed.*

JOHNSON. 3rd March 1860.

586. JOHN HENRY JOHNSON, of 47, Lincoln's Inn Fields, in the County of Middlesex, and of 166, Buchanan Street, in the City of Glasgow, North Britain, Gentleman, for an invention for—"Improvements in the manufacture of artificial fuel."—*A communication to him from abroad by Elijah Day Williams, and John Reed Bostick, both of Philadelphia, in the State of Pennsylvania, in the United States of America.* *Letters Patent sealed.*

ECCLES. 3rd March 1860.

587. JOSEPH ECCLES, of Blackburn, in the County of Lancaster, Cotton Manufacturer, for an invention for—"Improvements in machinery for the manufacture of bricks, tiles, pipes, and other articles formed of plastic materials." *Letters Patent sealed.*

MOUSTY. 3rd March 1860.

588. XAVIER MOUSTY, of 29, Boulevart St. Martin, Paris, in the Empire of France, Mechanician, for an invention for—"An improved apparatus for washing ores." *Letters Patent sealed.*

RAMSDEN. 3rd March 1860.

589. WILLIAM GRANDAGE RAMSDEN, of Liverpool, in the County of Lancaster, Engineer, for an invention for—"An improved boiler or apparatus for generating and super-heating steam, or heating water or other fluids under pressure." *Letters Patent sealed.*

BAUER. 3rd March 1860.

590. WILLIAM BAUER, of Munich, in the Kingdom of Bavaria, Submarine Engineer, for an invention for—"Improvements in apparatus for diving and for raising and lowering bodies in water, parts of which improvements are also applicable to other useful purposes." *Letters Patent sealed.*

HALE. 3rd March 1860.

591. WARREN STORMES HALE, of Queen Street, Cheapside, in the City of London, Manufacturer, for an invention for—"An improved candle lamp." *Letters Patent sealed.*

GEDGE. 3rd March 1860.

592. WILLIAM EDWARD GEDGE, of the firm of John Gedge and Son, No. 4, Wellington Street South, Strand, in the County of Middlesex, Patent Agents, for an invention for—"A liquid or novel preparation to be applied to wools."—*A communication to him from abroad by Jules Juhel Desmares, of Vire, in the Department of the Calvados, France, Cloth Manufacturer.*" *Letters Patent sealed.*

MUNTZ. 3rd March 1860.

593. WILLIAM HENRY MUNTZ, of Millbrook, in the County of Hants, for an invention for—"Improvements in the construction of ferry boats." *Letters Patent sealed.*

SCHIELE. 3rd March 1860.

594. CHRISTIAN SCHIELE, of Lower Bebbington, in the County of Cheshire, for an invention for—"Improvements in obtaining and applying motive-power from ocean or other waves." *Letters Patent sealed.*

HUMPHRYS. 3rd March 1860.

595. EDWARD HUMPHRYS, of Deptford, in the County of Kent, Engineer, for an invention for—"Improvements in marine boiler furnaces and in feeding the same." *Letters Patent sealed.*

BROEL. 5th March 1860.

596. JOSEPH BROEL, of Manchester, in the County of Lancaster, Merchant, for an invention for—"Certain improvements in the manufacture of soap."—*A communication to him from abroad by A. B. Devine, of New York, U. S. A.* *Letters Patent sealed.*

SIDEBOTTOM. 5th March 1860.

597. JOHN SIDEBOTTOM, of Broadbottom, near Mottram, in the County of Chester, Cotton Spinner and Manufacturer, for an invention for—"Certain improvements in looms for weaving." *Letters Patent sealed.*

PRICE. 5th March 1860.

598. CYRUS PRICE, of Wolverhampton, in the County of Staffordshire, for an invention for—"Improvements in locks and latches." *Letters Patent sealed.*

SMITH. 5th March 1860.

599. RICHARD SMITH, of No. 114, West Street, in the City of Glasgow, in Scotland, Manufacturing Chemist, for an invention for—"Improvements in the preparation and production of colouring matter." *Provisional protection only.*

JOHNSON. 5th March 1860.

600. JOHN HENRY JOHNSON, of 47, Lincoln's Inn Fields, in the County of Middlesex, and of 166, Buchanan Street, in the City of Glasgow, North Britain, Gentleman, for an invention for—"An improved ruffle and sewing-machine for producing the same, applicable also to ordinary stitching."—*A communication to him from abroad by George B. Arnold, and Abbey H. Price, both of the City of New York, in the United States of America.* *Letters Patent sealed.*

WILSON. PITT. 5th March 1860.

601. WILLIAM NEWTON WILSON, of 144, High Holborn, in the County of Middlesex, Sewing-Machine Manufacturer, and JAMES PITT, of Cleckheaton, in the County of Yorkshire, Machinist, for an invention for—"Improvements in apparatus for sewing-machines." *Letters Patent sealed.*

ASHBY. COULSON. 5th March 1860.

602. THOMAS WOODHOUSE ASHBY, of Stamford, in the County of Lincoln, Agricultural Implement Maker, and JOHN COULSON, also of Stamford, Engineer, for an invention for—"Improvements in thrashing-machines, part of which is applicable to cranks." *Letters Patent sealed.*

BROOMAN. 5th March 1860.

603. RICHARD ARCHIBALD BROOMAN, of 166, Fleet Street, in the City of London, Patent Agent, for an invention for—"Improvements in the manufacture of pipes for smoking."—*A communication to him from abroad by Auguste Bourrel, of Paris.* *Provisional protection only.*

BRIDGES. 5th March 1860.

604. WILLIAM BRIDGES, of Birmingham, in the County of Warwick, Manufacturer, for an invention for—"Improvements in the manufacture of elastic bands." *Letters Patent sealed.*

HOWARD. 5th March 1860.

605. JAMES HOWARD, of Bedford, Agricultural Implement Maker, for an invention for—"An improvement in the construction of horse rakes." *Letters Patent sealed.*

NEWTON. 5th March 1860.

606. WILLIAM EDWARD NEWTON, of the Office for Patents, 66, Chancery Lane, in the County of Middlesex, Civil Engineer, for an invention for—"Certain improvements in window sashes."—*A communication to him from abroad by Thomas Fry, of Brooklyn, King's County, and State of New York, United States of America.*
Letters Patent sealed.

FIELD. 6th March 1860.

607. EDWARD FIELD, of 10, Hart Street, Bloomsbury, London, for an invention for—"Improvements in the manufacture of railway tyres."
Provisional protection only.

COX. HOLLAND. 6th March 1860.

608. THOMAS COX, the younger, of Birmingham, in the County of Warwick Manufacturer, and WILLIAM HOLLAND, of Birmingham, aforesaid, Tool Maker for an invention for—"An improvement or improvements in the manufacture of the stretches of umbrellas and parasols." *Letters Patent sealed.*

LEEMING. 6th March 1860.

609. JOHN LEEMING, of Bradford, in the County of York, Machine Maker, for an invention for—"Improvements in looms for weaving."
Provisional protection only.

GEDGE. 6th March 1860.

610. WILLIAM EDWARD GEDGE, of the firm of John Gedge and Son, 4, Wellington Street South, Strand, in the County of Middlesex, Patent Agents, for an invention for—"An improved machine for drying fecula."—*A communication to him from abroad by Michel Antoine François Thibaud de Ménonville, of Rambervilliers Vosges, in the Empire of France, Potter.* *Letters Patent sealed.*

GEDGE. 6th March 1860.

611. WILLIAM EDWARD GEDGE, of the firm of John Gedge and Son, of 4, Wellington Street South, Strand, in the County of Middlesex, Patent Agents, for an invention for—"Improved machinery or apparatus for washing fecula."—*A communication to him from abroad by Michel Antoine François Thibaud de Ménonville, of Rambervilliers, Vosges, in the Empire of France, Potter.* *Letters Patent sealed.*

GEDGE. 6th March 1860.

612. WILLIAM EDWARD GEDGE, of the firm of John Gedge and Son, of 4, Wellington Street, South, Strand, in the County of Middlesex, Patent Agents, for an invention for—"Improvements in lathes."—*A communication to him from abroad by Frederic Gustave Pierret Delouette de Vouziers, Ardennes, France.*
Letters Patent sealed.

GEDGE. 6th March 1860.

613. WILLIAM EDWARD GEDGE, of the firm of John Gedge and Son, 4, Wellington Street South, in the County of Middlesex, Patent Agents, for an invention for—"Improvements in the manufacture of lasts and boot trees."—*A communication to him from abroad by Auguste Nicolas Jacquier, Paris, France, Last and Tree Maker.* *Provisional protection only.*

WALSH. 6th March 1860.

614. JOHN WALSH, of Stedalt Balbriggan, Ireland, for an invention for—"Improved machinery for cutting, tearing, crushing, or otherwise preparing for various useful and economical purposes furze or gorse, straw, bean-haulms, turnips, bark, flax or any other vegetable substances." *Letters Patent sealed.*

HUGON. 6th March 1860.

615. PIERRE HUGON, of Paris, in the French Empire, Civil Engineer, for an invention for—"Improvements in obtaining and applying motive-power."
Letters Patent sealed.

BUXTON. 6th March 1860.

616. WILLIAM BUXTON, of Staveley, in the County of Derby, for an invention for—"Improvements in safety cages for mines." *Letters Patent sealed.*

PITT. 6th March 1860.

617. ROBERT PITT, of Newark Ironfoundry, Bath, in the County of Somerset, for an invention for—"Improvements in the manufacture of leather and in machinery for that purpose." *Letters Patent sealed.*

JEUNE. 6th March 1860.

618. WILLIAM RICHARD JEUNE, of 4, Flower Terrace, Campbell Road, Bow, in the County of Middlesex, for an invention for—"Improvements in fire lighters."
Letters Patent sealed.

WALCOTT. 7th March 1860.

619. GEORGE WALCOTT, of No. 24, Abchurch Lane, in the City of London, Civil Engineer and Contractor, for an invention for—"An improved receptacle or receptacles for generating gas." *Letters Patent sealed.*

ARNOT. 7th March 1860.

620. JAMES ARNOT, of Birmingham, in the County of Warwick, Accountant Clerk, for an invention for—"A new or improved spindle for door and other knobs."
Letters Patent sealed.

HUGHES.
7th March 1860.

621. EDWARD THOMAS HUGHES, of the firm of Hughes and Son, 123, Chancery Lane, London, Patent Agents, for an invention for—"A hydro-dynamical re-acting rotary steam-engine."—*A communication to him from abroad by William Henry Christian Voss, Civil Engineer, of Stuttgart, in the Kingdom of Wurtemberg.*
Provisional protection only.

BILLINGTON.
7th March 1860.

622. EDWARD BILLINGTON, of the City of Manchester, in the County of Lancaster, Machinist, for an invention for—"Improvements in machinery for combing cotton, wool, flax, tow, silk waste and other fibrous substances."
Provisional protection only.

CHAPUIS.
7th March 1860.

623. CHARLES ANDRÉ CHAPUIS, of 29, Boulevart St. Martin, Paris, in the Empire of France, Chemist, for an invention for—"A new or improved process in manufacturing and ornamenting ceramic products chemically." *Letters Patent sealed.*

PAGET.
7th March 1860.

624. ARTHUR PAGET, of Loughborough, in the County of Leicester, Manufacturer, for an invention for—"Improvements in knitting-machinery."
Letters Patent sealed.

IMRAY.
COPELAND.
7th March 1860.

625. JOHN IMRAY, of 65, Bridge Road, Lambeth, in the County of Surrey, Engineer, and JAMES COPELAND, of 12, Marlborough Place, Kennington, in the same County, Engineer, for an invention for—"Improvements in steam and other hammers and anvils." *Letters Patent sealed.*

BEARDMORE.
RIGBY.
7th March 1860.

626. WILLIAM BEARDMORE, of Deptford, in the County of Kent, Engineer, and WILLIAM RIGBY, of Glasgow, Engineer, for an invention for—"Improvements in steam-engines." *Provisional protection only.*

DELABARRE.
8th March 1860.

627. CHRISTOPHE FRANÇOIS DELABARRE, Knight of the Legion of Honour, and C.E., of Neuilly, near the City of Paris, in the Empire of France, for an invention for—"Improved apparatus to be used in propelling gases and forcing liquids."
Provisional protection only.

GODDARD.
8th March 1860.

628. WILLIAM GODDARD, Engineer, of Park Hall, in the Parish of Caverswall, in the County of Stafford, for an inventien for—"An improvement in railway chairs."
Provisional protection only.

VEAL.
8th March 1860.

629. THOMAS VEAL, of Willenhall, in the County of Stafford, Manufacturer, for an invention for—"Improvements in curry combs." *Letters Patent sealed.*

BARTON.
SHEPHERD.
EVANS.
8th March 1860.

630. MOSES BARTON, Engineer, JOSIAH SHEPHERD, Lace Manufacturer, and THOMAS EVANS, Mineral and Coal Agent, all of the Town and County of the Town of Nottingham, for an invention for—"Certain improvements in the method of and apparatus for supplying and heating air, the same to be used as a motive-power for marine, locomotive, and stationary engines." *Provisional protection only.*

BIRKBECK.
8th March 1860.

631. GEORGE HENRY BIRKBECK, Engineer and Patent Agent, of 34, Southampton Buildings, Chancery Lane, in the County of Middlesex, for an invention for—"Improvements in floating docks."—*A communication to him from abroad by William Wain, of Copenhagen, in the Kingdom of Denmark.* *Letters Patent sealed.*

LEGG.
8th March 1860.

632. ROBERT LEGG, Millwright and Engineer, of 11, Ashby Street, Clerkenwell, in the County of Middlesex, for an invention for—"Appliances for heating twist or spun tobacco during the process of pressing." *Provisional protection NOT granted.*

BELL.
CUTTS.
8th March 1860.

633. JOHN BELL, of Manchester, in the County of Lancaster, Engineer, and WILLIAM CUTTS, of Salford, in the said County, Engineer, for an invention for—"Improvements in steam-engines." *Provisional protection only.*

PALLISER.
8th March 1860.

634. WILLIAM PALLISER, of Comragh, in the County of Waterford, Captain H. M. 18th Hussars, for an invention for—"Improvements in breech-loading rifles and other guns, and in cartridges to be used with such like fire-arms, also in shot used with rifled guns." *Provisional protection only.*

SHEARMAN.
8th March 1860.

635. GEORGE SHEARMAN, of Haggerston, in the County of Middlesex, Gas Meter Manufacturer, for an invention for—"Improvements in water gas meters."
Letters Patent sealed.

SPILLER.
8th March 1860.

636. GEORGE SPILLER, of No. 15, Upper Southwick Street, in the County of Middlesex, a Lieutenant Colonel in Her Majesty's Royal Artillery, for an invention for—"Improvements in knapsacks." *Letters Patent sealed.*

NAPIER. 8th March 1860.

637. JOHN NAPIER, of Glasgow, in the County of Lanark, Scotland, Engineer, for an invention for—"Improvements in steam-engines."
Provisional protection only.

LISTER. LEES. 9th March 1860.

638. JOSHUA LISTER, of Oldham, in the County of Lancaster, Foreman, and JOHN LEES, of the same place, Tin Plate Worker, for an invention for—"Improvements in the construction of oil cans." *Letters Patent sealed.*

RICHARDS. 9th March 1860.

639. WILLIAM RICHARDS, of the firm of Messrs. Samuel Richards and Sons, of "The Sand Fields Works," Canning Street, in the Town and County of the Town of Nottingham, Bleachers, Brushers and Finishers of Hosiery Goods, for an invention for—"Cleansing, rinsing or scouring lace, hosiery or other articles, whether made of silk, cotton or other material, from extraneous matter."
Provisional protection only.

SHELDON. 9th March 1860.

640. CATHERINE SHELDON, of Saint George's Place, Great Hampton Row, Birmingham, in the County of Warwick, Spur Manufacturer, for an invention for—"Certain improvements in ornamenting spurs and other metal portions of saddlery and harness furniture, and which said improvements are also applicable for ornamenting other fancy articles made of wrought or cast metal." *Letters Patent sealed.*

BIELEFELD. 9th March 1860.

641. CHARLES FREDERICK BIELEFELD, of Gower Street, in the County of Middlesex, for an invention for—"Improvements in the manufacture of wads for guns, and in cases for containing the charge of powder for the same."
Letters Patent sealed.

SAWYER. 9th March 1860.

642. JOSEPH SAWYER, of London, in the County of Middlesex, Engineer, for an invention for "Improvements in the construction of furnaces for steam-boilers and other purposes." *Provisional protection only*

CLAY. 9th March 1860.

643. WILLIAM CLAY, of Liverpool, in the County of Lancaster, Iron and Steel Manufacturer, for an invention for—"Improvements in the manufacture of gun barrels, cannon and other ordnance." *Letters Patent sealed.*

NEWTON. 9th March 1860.

644. WILLIAM EDWARD NEWTON, of the Office for Patents, 66, Chancery Lane, in the County of Middlesex, Civil Engineer, for an invention for—"An improved mode of attaching tools to handles."—*A communication to him from abroad by James Ezekiel Emerson, of San Francisco, California, United States of America.*
Letters Patent sealed.

SMITH. 9th March 1860.

645. THOMAS SMITH, of Manchester, in the County of Lancaster, Silk Finisher and Embosser, for an invention for—"Improvements in machinery or apparatus for ornamenting woven fabrics." *Provisional protection only.*

LUIS. 10th March 1860.

646. JOZÉ LUIS, of the British and Foreign Office for Patents, No. 1B, Welbeck Street, Cavendish Square, in the County of Middlesex, Patent Agent, for an invention for—"An improved calcarious varnishfor coating wood, metals, paper, ships, and other substances."—*A communication to him from abroad by Jean François Joseph Lecocq, of Cherbourg, in the Empire of France.* *Provisional protection only.*

LUIS. 10th March 1860.

647. JOZÉ LUIS, of the British and Foreign Office for Patents, No. 1B, Welbeck Street, Cavendish Square, in the County of Middlesex, Patent Agent, for an invention for—"An improved means of blasting rocks."—*A communication to him from abroad by Charles Honoré Hypolite Lepetit, of Cherbourg, in the Empire of France.*
Provisional protection only.

LUIS. 10th March 1860.

648. JOZÉ LUIS, of the British and Foreign Office for Patents, No. 1B, Welbeck Street, Cavendish Square, in the County of Middlesex, Patent Agent, for an invention for—"An improved mechanical damask loom."—*A communication to him from abroad by Philippe Joseph Galvaire, of Arras, Pas de Calais, in the Empire of France.*
Provisional protection only.

OTTLEY. 10th March 1860.

649. JOHN STRICKLAND OTTLEY, of No. 10, Evershold Street, Oakley Square, in the County of Middlesex, for an invention for—"An improved indicator for registering the withdrawal of liquids from casks or other vessels." *Letters Patent sealed.*

YOUNG. 10th March 1860.

650. JAMES HADDEN YOUNG, of 66, Great College Street, Camden Town, London, County of Middlesex, for an invention for—"Improvements in setting up (composing) and distributing types." *Letters Patent sealed.*

RAE.
10th March 1860.

651. JAMES RAE, of New Cross, in the County of Kent, Ship-builder, for an invention for—"Improvements in constructing iron ships, part of which improvements is applicable to the rivetting of boiler plates and others."
Letters Patent sealed.

ULLMER.
10th March 1860.

652. WILLIAM ULLMER, of Castle Street, Holborn, in the County of Middlesex, Manufacturer of Presses and Printing Materials, for an invention for—"An improvement in printing machines." *Letters Patent sealed.*

MORRIS.
10th March 1860.

653. TIMOTHY MORRIS, of Birmingham, in the County of Warwick, Manufacturer, for an invention for—"Improvements in voltaic batteries and in vats used in depositing metals by electricity." *Letters Patent sealed.*

POPE.
COOK.
WOODWARD.
10th March 1860.

654. FREDERICK ALEXANDER POPE, of Birmingham, in the County of Warwick, Grocer, and EDWIN FREDERICK COOK, of Birmingham, aforesaid, Manufacturer, and RICHARD FREDERICK WOODWARD, of Birmingham, aforesaid, Manufacturer, for an invention for—"Improvements in connecting brooms and brushes to their sticks or handles." *Letters Patent sealed.*

PILLING.
10th March 1860.

655. JOHN PILLING, of Colne, in the County of Lancaster, Machine Maker, for an invention for—"Improvements in brakes or apparatus for stopping looms when the shuttle is caught in the warp, which is applicable to all looms with a break applied to them." *Provisional protection only.*

JULLIENNE.
10th March 1860.

656. MARIE JOSÉPHINE ELISABETH JULLIENNE, of 29, Boulevart St. Martin, Paris, in the Empire of France, for an invention for—"An improved bath belt to be applied in the bathing vessels, and in electrical apparatus connected therewith."
Letters Patent sealed.

TUXFORD.
HILLS.
10th March 1860.

657. WILLIAM TUXFORD, of 106, Upper Thames Street, in the City of London, Merchant, and GEORGE WILLIAM HILLS, of Mortlake, in the County of Surrey, Gentleman, for an invention for—"Improvements in furnaces."
Letters Patent sealed.

HADDAN.
10th March 1860.

658. JOHN COOPE HADDAN, of No. 14, Bessborough Gardens, Pimlico, in the County of Middlesex, Civil Engineer, for an invention for—"Improvements in the manufacture of projectiles and of cannon for discharging the same."
Provisional protection only.

HOWELL.
12th March 1860.

659. JOSEPH BENNETT HOWELL, of Sheffield, in the County of York, Steel Manufacturer, for an invention for—"Improvements in tubes for boilers."
Provisional protection only.

DAVIES.
12th March 1860.

660. GEORGE DAVIES, of No. 1, Serle Street, Lincoln's Inn, in the County of Middlesex, and No. 28, St. Enoch Square, in the City of Glasgow, Civil Engineer and Patent Agent, for an invention for—"Improvements in steam-boilers and engines."—*A communication to him from abroad by Pierre Verrier, of Marseilles, France.* *Provisional protection only.*

LANGMAN.
12th March 1860.

661. JOHN LANGMAN, of Stonehouse, in the County of Devon, Gentleman, for an invention for—"An improved cartridge and method of manufacturing the same."
Letters Patent sealed.

NEWTON.
12th March 1860.

662. ALFRED VINCENT NEWTON, of the Office for Patents, 66, Chancery Lane, in the County of Middlesex, Mechanical Draughtsman, for an invention for—"Improvements in steam-engines."—*A communication to him from abroad by Henry Waterman, of New York, in the United States of America.* *Letters Patent sealed.*

ASHBY.
YORKE.
12th March 1860.

663. THOMAS WOODHOUSE ASHBY, Agricultural Implement Maker, and THOMAS YORKE, Fitter, both of Stamford, in the County of Lincoln, for an invention for—"Improvements in the construction of haymaking machines."
Letters Patent sealed.

NEWTON.
12th March 1860.

664. WILLIAM EDWARD NEWTON, of the Office for Patents, 66, Chancery Lane, in the County of Middlesex, Civil Engineer, for an invention for—"Improved machinery for making hat-bodies."—*A communication to him from abroad by S. B. Tobey, of Providence, Rhode Island, in the United States of America.* *Letters Patent sealed.*

MANGLES.
13th March 1860.

665. MARTIN MANGLES, of Number Six, Abchurch Yard, Cannon Street, E.C., in the City of London, Civil Engineer, for an invention for—"A new mode of applying gases so as to effect the purifying and bleaching oils and fats, purifying, disinfecting and deodorizing fœcal and decomposing matter, and the gaseous products of decomposition, decomposing deleterious gases, purifying and decoloring soap, preparing flax and other fibres, treating blood, night soil, bones and other substances whether solid, liquid, or gaseous." *Provisional protection only.*

GEDGE.
13th March 1860.

666. WILLIAM EDWARD GEDGE, of the firm of John Gedge and Son, No. 4, Wellington Street South, Strand, London, Patent Agents, for an invention for—"Improvements in apparatus for washing or dressing ores and analogous substances." —*A communication to him from abroad by A. Dufournel, of Vassy, Haute Marne, France, Iron Master.* *Letters Patent sealed.*

SMITH.
HATHAWAY.
13th March 1860.

667. SPENCER SMITH, Engineer, and PHILIP HATHAWAY, Gentleman, for an invention for—"Improvements in the manufacture of chains and other similar articles." *Letters Patent sealed.*

WRIGHT.
13th March 1860.

668. JAMES WRIGHT, of 42, Bridge Street, Blackfriars, City of London, Engineer, for an invention for—"An improved method, means and process of treating wood so that it becomes so changed as to be well adapted for uses for which it is naturally unfit."—*A communication to him from abroad by Philander Shaw, of Boston, Massachussetts, United States of America.* *Letters Patent sealed.*

MILLER.
KEMP.
13th March 1860.

669. MARMADUKE MILLER, and JOHN KEMP, of Mount Street, Nottingham, for an invention for—"Improvements in water and steam guages for steam-boilers." *Letters Patent sealed.*

NEWTON.
13th March 1860.

670. ALFRED VINCENT NEWTON, of the Office for Patents, 66, Chancery Lane, in the County of Middlesex, Mechanical Draughtsman, for an invention for—"An improved construction of churn."—*A communication to him from abroad by Edward Lynch, of the City of Buffalo, County of Erie, and State of New York, United States of America.* *Provisional protection only.*

NEWTON.
13th March 1860.

671. WILLIAM EDWARD NEWTON, of the Office for Patents, 66, Chancery Lane, in the County of Middlesex, Civil Engineer, for an invention for—"Improvements in railway tracks and carriage wheels."—*A communication to him from abroad by William Wharton, Junior, of Philadelphia, in the State of Pennsylvania, and United States of America.* *Letters Patent sealed.*

LUIS.
14th March 1860.

672. JOZÉ LUIS, of the British and Foreign Office for Patents, No. 1B, Welbeck Street, Cavendish Square, in the County of Middlesex, Patent Agent, for an invention for—"A pneumatic telegraph."—*A communication to him from abroad by Pierre Richarme, of Rive de Gier, in the Empire of France.* *Provisional protection only.*

BATISTE.
14th March 1860.

673. CHARLES BATISTE, of Toulouse, in the Empire of France, for an invention for—"An improved wood grooving machine." *Complete specification; Letters Patent sealed.*

JONGKINDT.
14th March 1860.

674. GERHARDUS HENDRICUS CONINCK JONGKINDT, at No. 14, Palace Road, Westminster Bridge, in the County of Surrey, for an invention for—"Improvements in the method of and apparatus for making cakes and purified or refined oil out of cotton seed." *Provisional protection only.*

HENRY.
14th March 1860.

675. MICHAEL HENRY, of 84, Fleet Street, in the City of London, Patent Agent, for an invention for—"Improvements in the construction of artificial hands, feet, and limbs, or substitutes for natural hands, feet and limbs and parts thereof."—*A communication to him from abroad by José Galleyos, of 33, Boulevard St. Martin, Paris, France.* *Letters Patent sealed.*

HECHT.
14th March 1860.

676. SALOMON HECHT, of 36, Gresham Street, London, for an invention for—"A new mode of advertising on articles of earthenware, pottery and the like in general use." *Provisional protection only.*

SIM.
14th March 1860.

677. JAMES SIM, of the City and County of Aberdeen, North Britain, Manufacturing Chemist, for an invention for—"Improvements in measuring and registering the flow or discharge of liquids." *Letters Patent sealed.*

SIM.
14th March 1860.

678. JAMES SIM, of the City and County of Aberdeen, North Britain, Manufacturing Chemist, for an invention for—"Improvements in meters or apparatus for measuring fluids." *Provisional protection only.*

JOHNSON. 14th March 1860.

679. JOHN HENRY JOHNSON, of 47, Lincoln's Inn Fields, in the County of Middlesex, and of 166, Buchanan Street, in the City of Glasgow, North Britain, Gentleman, for an invention for—"Improvements in cleaning rice and the machinery or apparatus employed therein."—*A communication to him from abroad by Silas Dodson, of San Francisco, in the State of California, and Alpheus Fobes, of the City and County of New York, in the United States of America.* *Letters Patent sealed.*

HORTON. KENDRICK. 14th March 1860.

680. ISAAC HORTON, and ISAIAH KENDRICK, of the firm of Horton, Son, and Kendrick, of Southwark, in the County of Surrey, Steam-boiler Manufacturers, for an invention for—"Improvements in steam-boilers." *Letters Patent sealed.*

CHEETHAM. 14th March 1860.

681. WILLIAM THOMAS CHEETHAM, of Rochdale, in the County of Lancaster, Mechanical Draftsman, for an invention for—"Improvements in cocks or taps." *Provisional protection only.*

HOPKINSON. RIDINGS. 14th March 1860.

682. JOHN ADDY HOPKINSON, of Huddersfield, in the County of York, Engineer, and ALFRED RIDINGS, of Bolton-le-Moors, in the County of Lancaster Boiler Maker, for an invention for "Improvements in steam-boilers and engines, and in apparatus connected therewith." *Provisional protection only.*

NEWTON. 14th March 1860.

683. ALFRED VINCENT NEWTON, of the Office for Patents, 66, Chancery Lane, in the County of Middlesex, Mechanical Draughtsman, for an invention for—"An improved construction of nail plate feeder."—*A communication to him from abroad by John Waldron Hoard, and Thomas A. Searle, of Providence, Rhode Island, in the United States of America.* *Letters Patent sealed.*

LÜDEKE. 15th March 1860.

684. JOHANN ERNST FRIEDRICH LÜDEKE, of Hanover, but now residing at Wolverhampton, in the County of Stafford, Gentleman, for an invention for—"Improvements in obtaining motive-power by means of certain fluid bodies, and in the apparatus connected therewith." *Provisional protection only.*

WILSON. 15th March 1860.

685. THOMAS WILSON, of Birmingham, in the County of Warwick, Engineer, for an invention for—"Improvements in breech loading fire-arms." *Letters Patent sealed.*

SHEARMAN. 15th March 1860.

686. CHARLES HENRY SHEARMAN, of South Belgravia, Gentleman, for an invention for—"Improvements in steam-engines." *Provisional protection only.*

HENRY. 15th March 1860.

687. MICHAEL HENRY, of 84, Fleet Street, in the City of London, Patent Agent, for an invention for—"Improvements in twisting fibrous materials, and in apparatus employed therein."—*A communication to him from abroad by François Durand, and Henry Auguste Pradel, of Paris, France.* *Letters Patent sealed.*

PATTISON. 15th March 1860.

688. WILLIAM MEAD PATTISON, of Frelighsburg, in the County of Missisquoi, Canada, Merchant, for an invention for—"Improvements in fountain pens and fountain penholders." *Provisional protection only.*

SHIELDS. SHIELDS. 15th March 1860.

689. JOHN SHIELDS, of the City and County of Perth, North Britain, Power Loom Manufacturer, and ALEXANDER SHIELDS, of Cromwell Park, in the same County, Manufacturer, for an invention for—"Improvements in jacquard looms or machinery for weaving." *Letters Patent sealed.*

LAUTH. 15th March 1860.

690. BERNARD LAUTH, of Manchester, in the County of Lancaster, Engineer, for an invention for—"Improvements in machinery or apparatus for rolling railroad rails, bars, beams and other such articles."—*A communication to him from abroad by John Fritz, of Johnstown, Pennsylvania, in the U. S. of America.* *Provisional protection only.*

MENNONS. 15th March 1860.

691. MARC ANTOINE FRANÇOIS MENNONS, of the British and Foreign Patent Offices, 39, Rue de l'Echiquier, Paris, in the Empire of France, for an invention for—"An improved arrangement of apparatus for working and controlling railway signal discs."—*A communication from Henri Petitpierre, Mechanical Engineer, residing in Paris.* *Letters Patent sealed.*

MENNONS, 15th March 1860.

692. MARC ANTOINE FRANÇOIS MENNONS, of the British and Foreign Patent Offices, 39, Rue de l'Echiquier, Paris, in the Empire of France, for an inveniion for —"An improved metallic window-sash."—*A communication from François Curé, residing at Paris, Civil Engineer.* *Provisional protection only.*

STURROCK. 15th March 1860.

693. GEORGE STURROCK, of Chatham, in the County of Kent, Staff Sergeant in the Royal Engineers, for an invention for—"Improvements in revolving fire-arms." *Provisional protection only.*

NORMAN. LUBÉ. 15th March 1860.

694. WILLIAM NICHOLAS NORMAN, of the City of Dublin, Ireland, Gentleman, and JOHN LUBÉ, of said City of Dublin, Esquire, for an invention for—"Improvements in guns and other fire-arms, and in cartridges to be used therewith."—The said William Nicholas Norman being the first and true inventor of a certain portion thereof, and the said John Lubé the first and true inventor of a certain other portion thereof. *Provisional protection NOT granted.*

WHITE. 16th March 1860.

695. GEORGE WHITE, of 34, Dowgate Hill, Cannon Street, in the City of London, for an invention for—"Applying as a substitute for the animal albumen hitherto obtained from birds' eggs or blood, certain parts of reptiles, fish, mollusca, and articulated or radiated animals."—*A communication to him from abroad by Mr. Johann Georg Leuchs, of Nurnberg, Bavaria.* *Letters Patent sealed.*

SAYER. 16th March 1860.

696. ROBERT BURGES SAYER, of Newport, in the County of Monmouth, Monmouthshire, Civil Engineer, for an invention for—"Improvements in parts of the permanent way of railways." *Letters Patent sealed.*

HUDSON. CATLOW. 16th March 1860.

697. WILLIAM HUDSON, of Burnley, in the County of Lancaster, Machinist, and CHRISTOPHER CATLOW, of the same place, Overlooker, for an invention for—"Certain improvements in power looms for weaving." *Letters Patent sealed.*

RIPLEY. 16th March 1860.

698. ABRAHAM RIPLEY, of 42, Bridge Street, Blackfriars, City of London, Engineer, for an invention for—"Improvements in the mode and process of treating the shavings, parings, and refuse of hides and leather, and also in the process and mode of treating or operating upon these and waste leather in order to produce a new article or fabric." *Provisional protection only.*

WEILD. 16th March 1860.

699. WILLIAM WEILD, of the City of Manchester, in the County of Lancaster Machinist, for an invention for—"Improvements in machinery for winding yarn or thread on to bobbins, spools, or other similar surfaces." *Letters Patent sealed*

LAIRD. 16th March 1860.

700. JOHN LAIRD, of Port Glasgow, in the County of Renfrew, North Britain, Merchant, for an invention for—"Improvements in effecting the exhaustion of steam-engine condensers." *Provisional protection only.*

HUDDART. HUDDART. 16th March 1860.

701. GEORGE AUGUSTUS HUDDART, and JOSEPH DURHAM ERSKINE HUDDART, both of Brynkir, in the County of Caernarvon, Gentlemen, for an invention for—"Improvements in obtaining and applying motive-power." *Provisional protection only.*

WOOD. 16th March 1860.

702. WILLIAM WOOD, of Monkhill, near Pontefract, in the County of York, for an invention for—"Improvements in the manufacture of fibrous yarns and fabrics of cotton, flax, wool or other material." *Letters Patent sealed.*

RICHARDSON. 16th March 1860.

703. THOMAS RICHARDSON, of Newcastle-on-Tyne, for an invention for—"Improvements in treating organic and other substances containing phosphate of lime." *Letters Patent sealed.*

NIXON. 16th March 1860.

704. JAMES NIXON, of St. Peter's Quay, Newcastle-upon-Tyne, for an invention for—"Improvements in the manufacture of hypo-sulphite of soda." *Letters Patent sealed; no specification filed.*

REYNOLDS. 16th March 1860.

705. JOHN REYNOLDS, Junior, of 57, New Compton Street, Soho, in the County of Middlesex, for an invention for—"Improvements in the manufacture of wire or metal netting and in machinery employed therein." *Letters Patent sealed.*

WILSON. 17th March 1860.

706. WILLIAM NEWTON WILSON, of 144, High Holborn, in the County of Middlesex, Sewing-machine Manufacturer, for an invention for—"Improvements in floor sweepers." *Letters Patent sealed.*

COPE. COPE. WARD. 17th March 1860.

707. EDWARD COPE, WILLIAM COPE, and WILLIAM GEORGE WARD, all of New Basford, near Nottingham, in the Shire of Nottingham, Manufacturers, for an invention for—"Improvements in the manufacture of fabrics in lace machinery, and in the means or apparatus employed therein." *Letters Patent sealed.*

BROOMAN. 17th March 1860.

708. RICHARD ARCHIBALD BROOMAN, of 166, Fleet Street, in the City of London, Patent Agent, for an invention for—"Improvements in machinery for dressing warp threads."—*A communication to him from abroad by Jean Victor Alfred Rust, of Gaillon, France.* *Provisional protection only.*

BRIGGS. 17th March 1860.

709. RICHARD BRIGGS, of Birmingham, in the County of Warwick, Manufacturer, for an invention for—"A new or improved washing-machine." *Letters Patent sealed.*

BROTHERHOOD. 17th March 1860.

710. PETER BROTHERHOOD, of Chippenham, in the County of Wilts, Railway Engineer, for an invention for—"An improved method of generating steam in locomotive, stationary, marine, or any other form of steam-boiler." *Letters Patent sealed.*

CLARK. 17th March 1860.

711. WILLIAM CLARK, of 53, Chancery Lane, in the County of Middlesex, Engineer and Patent Agent, for an invention for—"Improvements in the application of paper to filtering fluids."—*A communication to him from abroad by Messrs. Gustave Devillepoix, Chemist, and Joseph François Bonnaterre, Civil Engineer, both of Paris, in the Empire of France.* *Letters Patent sealed.*

RICHARDSON. PRENTICE. 17th March 1860.

712. THOMAS RICHARDSON, of Newcastle-on-Tyne, and MANNING PRENTICE, of Stowmarket, for an invention for—"Improvements in the manufacture of hydrated oxides and salts of iron, and salts of the fixed alkalies." *Letters Patent sealed.*

JOHNSON. 17th March 1860.

713. JOHN HENRY JOHNSON, of 47, Lincoln's Inn Fields, in the County of Middlesex, and of 166, Buchanan Street, in the City of Glasgow, North Britain, Gentleman, for an invention for—"Improvements in apparatus for controlling refractory horses."—*A communication to him from abroad by Henry Crane, of the City of New York, in the United States of America.* *Provisional protection only.*

HODGSON. HODGSON. 19th March 1860.

714. WILLIAM HODGSON, and HENRY HODGSON, of Bradford, in the County of York, Machine and Tool Makers, for an invention for—"Improvements in means or apparatus for preparing and spinning fibrous substances." *Provisional protection only.*

ELLIS. WINTERBOTTOM. BRADOCK. 19th March 1860.

715. JOHN ELLIS, of Droylsden, in the County of Lancaster, Engineer, and WILLIAM WINTERBOTTOM, & JOHN BRADOCK, of the same place, Managers, for an invention for—"Certain improvements in or applicable to steam-engines." *Letters Patent sealed.*

GOLDIE. 19th March 1860.

716. THOMAS GOLDIE, of Airdrie, in the County of Lanark, North Britain, Mill Manager, for an invention for—"Improvements in looms for weaving." *Provisional protection only.*

CLARK. 19th March 1860.

717. WILLIAM CLARK, of 53, Chancery Lane, in the County of Middlesex. Engineer and Patent Agent, for an invention for—"Improvements in tanning hides." —*A communication to him from abroad by Mr. Wilhelm Martz, Chemist, of 29, Boulevart St. Martin, Paris, in the Empire of France.* *Letters Patent sealed.*

BIELEFELD. 19th March 1860.

718. CHARLES FREDERICK BIELEFELD, of Gower Street, in the County of Middlesex, for an invention for—"Improvements in the fabrication of plastic materials pressed in moulds for building and ornamental purposes and for statuary." *Letters Patent sealed.*

HEAL. 19th March 1860.

719. JOHN HARRIS HEAL, of Tottenham Court Road, in the County of Middlesex, for an invention for—"Improvements in spring mattresses." *Letters Patent sealed.*

PARSONS. 20th March 1860.

720. PERCEVAL MOSES PARSONS, of Arthur Street West, London Bridge, in the County of Middlesex, Civil Engineer, for an invention for—"Improvements in fire-arms and projectiles to be used therewith." *Letters Patent sealed.*

WILLIAMSON. WILLIAMSON. 20th March 1860.

721. JOHN WILLIAMSON, and FRANCIS WILLIAMSON, both of Griffe Mill, near Keighley, in the County of York, Manufacturers, for an invention for—"Improvements in looms for weaving." *Letters Patent sealed.*

COLE. 20th March 1860.

722. JOHN JENKINS COLE, of Essex Street, Strand, in the County of Middlesex, for an invention for—"Improvements in chimneys." *Provisional protection only.*

ASPELL. BOOTH. HURST. 20th March 1860.

723. JAMES ASPELL, of Middleton, in the County of Lancaster, Manufacturer, and EDWARD BOOTH, of Tonge, near Middleton, Manager, and JAMES HURST, of the same place, Overlooker, for an invention for—"Certain improvements in power looms for weaving." *Letters Patent sealed.*

GARDNER. 20th March 1860.

724. EDWARD GARDNER, of Maidstone, in the County of Kent, Engineer and Brassfounder, for an invention for—"Improvements in apparatus for the manufacture of paper." *Letters Patent sealed.*

LAW. 20th March 1860.

725. THOMAS LAW, of Uppingham, Rutland, for an invention for—"Improvements in reaping and mowing machines." *Provisional protection only.*

SHAND. 20th March 1860.

726. ALEXANDER SHAND, of Liverpool, Merchant, for an invention for—"Improvements in preparing or bleaching coir fibre and coir yarns."—*A communication to him from abroad by Charles Shand, residing at Colombo, Ceylon.*
Letters Patent sealed.

FINCH. 20th March 1860.

727. EDWARD FINCH, of Chepstow, for an invention for—"Improvements in constructing railway switches and crossings." *Provisional protection only.*

BROWN. 20th March 1860.

728. JOHN BROWN, of Norwich, in the County of Norfolk, Architect and Surveyor, for an invention for—"Improvements in window sashes, frames and doors in order to render them when closed, air, dust and water-tight." *Letters Patent sealed.*

NEWHOUSE. 21st March 1860.

729. JAMES NEWHOUSE, of Farnworth, near Bolton-le-Moors, in the County of Lancaster, Manager, for an invention for—"Certain improvements in machinery for preparing, spinning and doubling cotton and other fibrous materials."
Letters Patent sealed.

TAYLOR. 21st Maach 1860.

730. JOHN INGHAM TAYLOR, the Cottage, Botanic Gardens, Sloane Street, in the County of Middlesex, Engineer, for an invention for—"Improvements in apparatus for the manufacture of gas from oil and oleaginous substances."
Letters Patent sealed.

HERBERT. 21st March 1860.

731. JANE ANN HERBERT, of Guildford, in the County of Surrey, Widow, for an invention for—"Manufacturing of oxychloride of lead."—*A communication to her from abroad by Ludwig Brumleu, of New York, in the United States of America.*
Complete specification; Letters Patent sealed.

SYKES. SYKES. CROSSLEY. 21st March 1860.

732. THOMAS SYKES, Manufacturing Chemist and Oil Merchant, and BENJAMIN CLIFFORD SYKES, M.D., both of Cleckheaton, in the County of York, and JAMES WILLIAM CROSSLEY, Dyer and Finisher, of Brighouse, in the aforesaid County of York, for an invention for—"Improvements in apparatus for heating water, air or other fluids, generating and superheating steam, preventing incrustation in steam-boilers, and consuming smoke." *Letters Patent sealed.*

RICHARDSON. 21st March 1860.

733. THOMAS RICHARDSON, of 20, New Bridge Street, Newcastle-on-Tyne, for an invention for—"Improvements in the manufacture of salts of alumina."
Letters Patent sealed.

SPENCE. 21st March 1860.

734. WILLIAM SPENCE, of 50, Chancery Lane, in the County of Middlesex, Patent Agent, for an invention for—"Improvements in sewing-machines."—*A communication to him from abroad by James Willcox, of New York, in the United States.*
Letters Patent sealed.

NEWTON. 21st March 1860.

735. WILLIAM EDWARD NEWTON, of the Office for Patents, 66, Chancery Lane, in the County of Middlesex, Civil Engineer, for an invention for—"An improved preparation or solution for toning photographic pictures."—*A communication to him from abroad by Joseph Chase Rutherford, and Benjamin Hinman Steele, of Derby Line, in the County of Orleans, and State of Vermont, United States of America.*
Provisional protection only.

MACDONALD. 21st March 1860.

736. WILLIAM STEVENSON MACDONALD, of Manchester, in the County of Lancaster, Chemist, for an invention for—"Improvements in dyeing or printing woven fabrics of mixed materials." *Letters Patent sealed.*

NEWTON. 21st March 1860.

737. ALFRED VINCENT NEWTON, of the Office for Patents, 66, Chancery Lane, in the County of Middlesex, Mechanical Draughtsman, for an invention for—"An improved construction of bridle."—*A communication to him from abroad by E. Biechy, of Colmar, in the Empire of France.* *Provisional protection only.*

BLACKWOOD. 21st March 1860.

738. JOHN BLACKWOOD, of the Town and County of Banff, North Britain, Engineer, for an invention for—"Improvements in furnace or fire bars."
Letters Patent sealed.

PHILLIPS. 21st March 1860.

739. JOHN DAVIS PHILLIPS, of Ghent, in the Kingdom of Belgium, Engineer, for an invention for—"Improvements in steam-engines." *Provisional protection only.*

STAINTHORP. 22nd March 1860.

740. JOHN STAINTHORP, of the City of Brooklyn, in the County of Kings, and State of New York, in the United States of America, now at 67, Gracechurch Street, London, England, for an invention for—"An improved method in coating or forming a hard shell on a candle at the time of moulding the same, and in apparatus connected therewith." *Letters Patent sealed.*

TURNER. 22nd March 1860.

741. WILLIAM TURNER, of No. 39, Hockley, in the Town and County of the Town of Nottingham, Baker and Flour Dealer, for an invention for—"A new mode or method of making or manufacturing bread and other articles of paste, and in the machinery or apparatus employed therein." *Letters Patent sealed.*

CRAWSHAY. 22nd March 1860.

742. GEORGE CRAWSHAY, of the Gateshead Iron Works, in the County of Durham, Ironmaster, for an invention for—"Improvements in the manufacture of iron pulleys for winding from coal pits and other purposes." *Letters Patent sealed.*

CALVERT. LIGHT. 22nd March 1860.

743. GEORGE JOHN CALVERT, of the City of York, Engineer and Ironfounder, and CHARLES LLEWELLYN LIGHT, of Parliament Street, in the City of Westminster, Civil Engineer, for an invention for—"Improvements in portable buildings and structures." *Letters Patent sealed.*

BELL. 22nd March 1860.

744. JOHN SMITH BELL, of the Town and County of Newcastle-upon-Tyne, Engineer, for an invention for—"Improvements in steam-engines and boilers." *Letters Patent sealed.*

GRAINGER. 22nd March 1860.

745. JOHN GRAINGER, of Handsworth, in the County of Stafford, Gun Maker, for an invention for—"An improvement or improvements in breech loading fire-arms." *Letters Patent sealed.*

RENNIE. 22nd March 1860.

746. GEORGE BANKS RENNIE, of the firm of George Rennie and Sons, Holland Street, Blackfriars, Civil Engineer, for an invention for—"Improvements in the construction and mode of working and employing floating platforms, pontoons or docks for supporting ships or other vessels." *Letters Patent sealed.*

MILLARD. 22nd March 1860.

747. DAVID MILLARD, of Liverpool, in the County of Lancaster, Gentleman, for an invention for—"Improvements in sewing-machines."—*A communication to him from abroad by James Rowe, of Cincinnati, in the State of Ohio, and United States of America.* *Letters Patent sealed.*

PEPPÉ. 22nd March 1860.

748. GEORGE TOSCO PEPPÉ, of 8, Peak Hill, Sydenham, in the County of Kent, for an invention for—"Improvements in the manufacture of thin sheet lead coated with tin." *Letters Patent sealed.*

VIGURS. 23rd March 1860.

749. HENRY VIGURS, Accountant Clerk, of Round Hills, Aston, near Birmingham, in the County of Warwick, for an invention for—"Certain improvements in the treatment of paper or cardboard, such paper or cardboard being used for cards, wrappers or boxes, for exhibiting and holding small articles usually sold on cards or in boxes, also in the former of such boxes and wrappers, and the manner of attaching specimens of contents thereto." *Letters Patent sealed.*

JENNINGS. STOTT. 23rd March 1860.

750. JOSEPH PICKLES JENNINGS, and FREDERIC SARLEY STOTT, both of Bradford, in the County of York, Engineers and Ironfounders, for an invention for—"Improvements in singe plates." *Letters Patent sealed.*

TAYLOR. TAYLOR. TAYLOR. 23rd March 1860.

751. JOHN TAYLOR, MARK TAYLOR, and GEORGE TAYLOR, of the firm of Taylor Brothers, of Denton, in the County of Lancaster, Hat Manufacturers, for an invention for—"Improvements in the manufacture of hats or of giving the final shape to the brims thereof." *Provisional protection only.*

PRATER. 23rd March 1860.

752. CHARLES PRATER, of the firm of Charles Prater and Company, of No. 2, Charing Cross, in the County of Middlesex, Army Accoutrement Makers, for an invention for—"Improvements in ammunition, bayonet and sword belts, and in pouches to be worn therewith." *Letters Patent sealed.*

HAYEM. 23rd March 1860.

753. ISIDORE HAYEM, Junior, of 2, Rue Sainte Appoline, Paris, France, Merchant, for an invention for—"Certain improvements in making cravats and stocks—'magical cravats.'" *Letters Patent sealed.*

HARRISON. ASHWORTH. LORD. 23rd March 1860.

754. RICHARD HARRISON, and DAVID ASHWORTH, of Burnley, in the County of Lancaster, Cotton Spinners, and JOSEPH LORD, of the same place, Carder, for an invention for—"A certain improvement in machinery or apparatus for preparing, spinning and twisting cotton and other fibrous substances." *Provisional protection only.*

ASHWORTH. 23rd March 1860.

755. CHARLES ASHWORTH, of Fairfield, in the County of Lancaster, Manufacturer, for an invention for—"Certain improvements in power looms for weaving." *Letters Patent sealed.*

WATTS. 23rd March 1860.

756. JOEL WATTS, of Clifton Cottage, Sleaford Street, Battersea Park, in the County of Surrey, for an invention for—" An improved safety valve."
Letters Patent sealed.

MEYER. 23rd March 1860.

757. FREDERICK CHRISTIAN MEYER, of Prune Street, Philadelphia, in the United States of America, Manufacturer, for an invention for—" Improvements in machinery for copying ornamental figures and forms." *Letters Patent sealed.*

NEWTON. 23rd March 1860.

758. WILLIAM EDWARD NEWTON, of the Office for Patents, 66, Chancery Lane, in the County of Middlesex, Civil Engineer, for an invention for—" Certain improvements in looms for weaving."—*A communication to him from abroad by Silas C. Salisbury, of New York, U. S. A.* *Letters Patent sealed.*

COOPER. 23rd March 1860.

759. BENJAMIN COOPER, of Frome, in the County of Somerset, Woollen Cloth Manufacturer, for an invention for—" Improvements in sizing and drying yarns preparatory to weaving." *Letters Patent sealed.*

LEWIS. 23rd March 1860.

760. WILLIAM STUMP LEWIS, of Moseley Street, in the City of Manchester, Merchant, for an invention for—" Improvements in the manufacture of illuminating gas."—*A communication to him from abroad by Professor Sanders, of Philadelphia, in the United States of America.* *Letters Patent sealed.*

LISTER. 23rd March 1860.

761. SAMUEL CUNLIFFE LISTER, of Manningham, in the County of York, for an invention for—" Improvements in carding and preparing machines."
Letters Patent sealed.

DEANE. DEANE. HARDING. 23rd March 1860.

762. JOHN DEANE, and JOHN DEANE, Junior, trading under the style or firm of John Deane and Son, of King William Street, in the City, London, Gun and Pistol Manufacturers, and WILLIAM HARDING, of Forest Hill, in the County of Kent, for an invention for—" Improvements in breech-loading fire-arms."—*The result partly of communications from abroad made to them by Captain Alexandre Delvigne, of les Ternes, near Paris, and partly of invention and discovery made by one of them.* *Letters Patent sealed.*

SNOW. 23rd March 1860.

763. GEORGE KNOWLES SNOW, of Watertown, of the State of Massachusetts, of the United States of America, for an invention for—" Improvements having reference to bookbinding and the folding and pasting of sheets of paper therefor."
Complete specification; Letters Patent sealed.

PHYSICK. 24th March 1860.

764. HENRY VERNON PHYSICK, of 38, North Bank, Regent's Park, London, for an invention for—" Improvements in electric telegraphs and apparatus connected therewith." *Provisional protection only.*

HAYWOOD. 24th March 1860.

765. HERBERT HAYWOOD, of Birmingham, in the County of Warwick, Button Maker, for an invention for—" Improvements in machinery for the manufacture of buttons and other similar articles." *Letters Patent sealed.*

DALE. 24th March 1860.

766. JOHN DALE, of Manchester, in the County of Lancaster, Manufacturing Chemist, for an invention for—" Improvements in the preparation of a colouring matter for dyeing textile materials and fabrics and other substances."
Letters Patent sealed.

NEWTON. 24th March 1860.

767. WILLIAM EDWARD NEWTON, of the Office for Patents, 66, Chancery Lane, in the County of Middlesex, Civil Engineer, for an invention for—" Improvements in calendars for clocks or other timekeepers."—*A communication to him from abroad by Wait T. Huntington, and Henry Platt, of Ithaca, Tompkins County, in the State of New York, United States of America.* *Letters Patent sealed.*

INGLIS. 24th March 1860.

768. JAMES INGLIS, of Glasgow, in the County of Lanark, North Britain, Gentleman, for an invention for—" An improved artificial fuel."
Provisional protection only.

MENNONS. 24th March 1860.

769. MARC ANTOINE FRANÇOIS MENNONS, of the British and Foreign Patent Offices, 39, Rue de l'Echiquier, Paris, in the Empire of France, for an invention for —" An improved means of closing or filling metallic joints."—*A communication from Frédéric Pierre Langenard, residing at Paris, Mechanical Engineer.*
Letters Patent sealed.

MENNONS. 24th March 1860.

770. MARC ANTOINE FRANÇOIS MENNONS, of the British and Foreign Patent Offices, 39, Rue de l'Echiquier, Paris, in the Empire of France, for an invention for —" Certain improvements in the method of and apparatus for the manufacture of candles."—*A communication from Léopold Autran, residing at Milan, in the Kingdom of Piedmont.* *Provisional protection only.*

ABBOTT.
24th March 1860.

771. EDWARD ABBOTT, of 18, Manchester Street, Manchester Square, in the County of Middlesex, for an invention for—"An improvement in steering ships and other vessels." *Provisional protection only.*

BLACKBURN.
24th March 1860.

772. ISAAC BLACKBURN, of Long-Eaton, in the County of Derby, and of No. 35, Parliament Street, Westminster, Mechanical Engineer, for an invention for—"Improvements in the manufacture of iron and steel, and in making iron castings." *Letters Patent sealed.*

JOHNSON.
24th March 1860.

773. JOHN HENRY JOHNSON, of 47, Lincoln's Inn Fields, in the County of Middlesex, and of 166, Buchanan Street, in the City of Glasgow, North Britain, Gentleman, for an invention for—"Improvements in the production of colors for dyeing or printing."—*A communication to him from abroad by the Company "L. et E. Boilley Freres," of Paris, in the Empire of France.* *Letters Patent sealed.*

CORRY.
24th March 1860.

774. JAMES BARRETT CORRY, of Queen Camel, in the County of Somerset, Leather Dresser and Glover, for an invention for—"Improvements in the manufacture of gloves." *Letters Patent sealed.*

MARTIN.
PIDDING.
26th March 1860.

775. CHARLES MARTIN, of Isleworth, in the County of Middlesex, Civil Engineer, and WILLIAM PIDDING, of the Borough Road, in the Borough of Southwark, in the County of Surrey, Gentleman, for an invention for—"Improvements in the manufacture of paper, applicable also to the manufacture of hats, bonnets, caps, and various articles of ladies' and gentlemen's wearing apparel, furniture, boxes, ornaments, bottles, casks, and various articles of utility, vehicles, houses, sailing and steam vessels, and boats; in the mixture of liquids, fibrous and other substances or materials for such purposes, and in the machinery connected therewith." *Provisional protection only.*

CARTER.
26th March 1860.

776. JOHN MONEY CARTER, of Somerset House, Monmouth, in the County of Monmouth, Captain Unattached and Adjutant of the Royal Monmouthshire Militia, for an invention for—"Improvements in knapsacks and pouches for the use of soldiers and others." *Letters Patent sealed.*

RONALD.
26th March 1860.

777. JAMES RONALD, of Liverpool, in the County of Lancaster, Merchant, for an invention for—"Improvements in machinery for the spinning of hemp, flax, manilla or other like fibrous material." *Letters Patent sealed.*

MAXWELL.
26th March 1860.

778. JOSEPH ALEXANDER MAXWELL, of 53, Chancery Lane, in the County of Middlesex, Gentleman, for an invention for—"Improvements in hydraulic engines to act either alone or in combination with steam and steam-engines." *Letters Patent sealed.*

GOURLAY.
KEMP.
26th March 1860.

779. HENRY GOURLAY, of the Dundee Foundry, Dundee, in the County of Forfar, and EBENEZER KEMP, of the same place, Manager, for an invention for—"Improvements in steam-engines and boilers." *Letters Patent sealed.*

MITCHELL.
26th March 1860.

780. JOSEPH MITCHELL, of Sheffield, in the County of York, Architect, for an invention for—"An improvement in pullies applicable for raising and lowering window blinds, maps and other articles mounted upon rollers, and retaining them in a given position." *Letters Patent sealed.*

NISSEN.
26th March 1860.

781. HILARY NICHOLAS NISSEN, of Mark Lane, in the City of London, Engraver and Stationer, for an invention for—"Improvements in the preparation of paper in order to prevent the extraction or alteration of writings thereon without detection." *Provisional protection only.*

BOWEN.
26th March 1860.

782. HENRY BOWEN, of Spring Bank, Cardiff, in the County of Glamorgan, Gas Engineer, for an invention for—"An improved standard gas meter." *Provisional protection only.*

JOHNSON.
26th March 1860.

783. JOHN HENRY JOHNSON, of 47, Lincoln's Inn Fields, in the County of Middlesex, and of 166, Buchanan Street, in the City of Glasgow, North Britain, Gentleman, for an invention for—"Improvements in shaping metals, and in the machinery or apparatus employed therein."—*A communication to him from abroad by Jean Baptiste Vin, of 40, Rue Consulat, Marseilles, in the Empire of France, Undertaker.* *Letters Patent sealed.*

CHURCH.
26th March 1860.

784. JABEZ CHURCH, of Upper Kennington Lane, Vauxhall, in the County of Surrey, for an invention for—"Improvements in the manufacture of coke." *Letters Patent sealed.*

RENSHAW. 26th March 1860.

785. EDWARD GREENHILL RENSHAW, of Little Nelson Street, City Road, in the County of Middlesex, Fancy Box Manufacturer, for an invention for—"A machine for cutting or producing from wood certain articles called 'machine lights' or wood spills or lighters used for lighting pipes and candles and other similar purposes." *Letters Patent sealed.*

DE NORMANDY. 27th March 1860.

786. ALPHONSE RENÉ LE MIRE DE NORMANDY, of Odin Lodge, King's Road, Clapham Park, in the County of Surrey, Analytical Chemist, for an invention for—"Improvements in obtaining fresh water from salt water." *Letters Patent sealed.*

GILLESPIE. 27th March 1860.

787. CHARLES GILLESPIE, of the City of Manchester, in the County of Lancaster, House and Furniture Painter, for an invention for—"Improvements in bed-steads."—*A communication to him from abroad by Samuel Gillespie, of New York, U.S. of America.* *Provisional protection only.*

BRIGGS. 27th March 1860.

788. THOMAS BRIGGS, of Salford, in the County of Lancaster, Oilcloth Manufacturer, for an invention for—"Certain improvements in the manufacture of oilcloth or oil paper to be employed for packing purposes or for coating or covering surfaces, and in apparatus connected therewith." *Provisional protection only.*

POHLMAN. 27th March 1860.

789. EDWARD POHLMAN, of Halifax, in the County of York, Pianoforte Maker, for an invention for—"Improvements in those musical instruments known as "German concertinas"." *Letters Patent sealed.*

HUNT. 27th March 1860.

790. JOHN ROLFE HUNT, of Chichester Place, Wandsworth Road, in the County of Surrey, for an invention for—"Improvements in tobacco pipes." *Provisional protection only.*

CRAUFURD. 27th March 1860.

791. MATTHEW CRAUFURD, of the Kinson Clay Pottery, near Poole, in the County of Dorset, Gentleman, for an invention for—"Improvements in blocks or bricks for building purposes." *Letters Patent sealed.*

CLARKE. 27th March 1860.

792. HENRY MARTYN CLARKE, of the State of Massachusetts, of the United States of America, for an invention for—"A new and useful or improved machine for the making and sizing of pulp used in the manufacture of paper."—*A communication to him from Thomas Eustice, and Joseph Jordan, Junior, both residing at Hartford, in the State of Connecticut, of the said United States.* *Complete specification: Letters Patent sealed.*

LANGSTEIN. 27th March 1860.

793. JAMES LANGSTEIN, of Charing Cross, in the County of Middlesex, Tobacconist, for an invention for—"Improvements in the manufacture of tobacco pipes." *Letters Patent sealed.*

MILLARD. 27th March 1860.

794. DAVID MILLARD, of Liverpool, in the County of Lancaster, Gentleman, for an invention for—"Improvements in sewing-machines."—*A communication to him from abroad by W. E. Braman, of Cincinnati, in the State of Ohio, and United States of America.* *Letters Patent sealed.*

NEWTON. 27th March 1860.

795. WILLIAM EDWARD NEWTON, of the Office for Patents, 66, Chancery Lane, in the County of Middlesex, Civil Engineer, for an invention for—"An improved washing-machine."—*A communication to him from abroad by George L. Witsil, of the City of Wilmington, in the State of Delaware, United States of America.* *Letters Patent sealed.*

WEEMS. 28th March 1860.

796. JOHN WEEMS, of Johnstone, in the County of Renfrew, North Britain, Engineer, for an invention for—"Improvements in steam-boilers or heat and steam generators, and in the application of heat." *Letters Patent sealed.*

BARTHÉLEMY. 28th March 1860.

797. CARL BARTHÉLEMY, of 27, Busch Lane, London, for an invention for—"Using vacuum as a motive-power, and of the means by which the same is effected." *Letters Patent sealed.*

HANCOCK. 28th March 1860.

798. JAMES LAMB HANCOCK, of Pentonville Road, in the County of Middlesex, Manufacturer, for an invention for—"An improved apparatus for working and shaping butter and for separating it from the butter milk." *Letters Patent sealed.*

DE MANIQUET. 28th March 1860.

799. JEAN ANTOINE DE MANIQUET, of Paris, in the French Empire, Manufacturer, for an invention for—"Improvements in winding, doubling, twisting and spinning silk, cotton, wool, flax, hemp, cord, and other filamentous materials." *Letters Patent sealed.*

EWER.
28th March 1860.

800. EDWARD EWER, of Chapel Street, Curtain Road, Shoreditch, in the County of Middlesex, Typefounder, for an invention for—"Improvements in fountain pens."
Letters Patent sealed.

DAGRON.
28th March 1860.

801. AENÉ PRUDENT PATRICE DAGRON, of Paris, in the French Empire, Photographer, for an invention for—"An improved microscope to be used for exhibiting photographic views and productions." *Letters Patent sealed.*

LEONARD.
28th March 1860.

802. JAMES LEONARD, of 4, Skinner's Place, Sise Lane, E.C., for an invention for—"Improvements in apparatus used when weaving."—*A communication to him from abroad by Carl Heinrich Zimmermann, of Glauchou, Saxony.*
Letters Patent sealed.

WILSON.
28th March 1860.

803. GEORGE FERGUSSON WILSON, of Belmont, Vauxhall, in the County of Surrey, Managing Director of Price's Patent Candle Company, Limited, for an invention for—"Improvements in treating fatty and oily matters."
Letters Patent sealed.

COLLYER.
28th March 1860.

804. ROBERT HANHAM COLLYER, of Beta House, Alpha Road, Regent's Park in the County of Middlesex, M.D., and Ph. D., for an invention for—"Improvements in manufacturing pulp for paper, papier maché and other similar uses, and in apparatus employed therein, part of the invention being also applicable to other operations, in which materials have to be subjected to the action of liquids, steam and other fluids." *Letters Patent sealed.*

SMITH.
28th March 1860.

805. STEPHEN RANDOLL SMITH, of Hanover Terrace, Cumberland Road, Bristol, for an invention for—"Improvements in vessels and apparatus used for raising sunken vessels and other bodies in the water, and for lowering materials for structural purposes in the water." *Letters Patent sealed.*

STEVENS.
29th March 1860.

806. CHARLES STEVENS, Manager of the British and Foreign Office for Patents, 18, Welbeck Street, Cavendish Square, in the County of Middlesex, for an invention for—"Improvements in steel yards and scales."—*A communication to him from abroad by P. Danion, of Brest, in the Empire of France.* *Letters Patent sealed.*

HASELTINE.
KNIGHT.
29th March 1860.

807. GEORGE HASELTINE, and JOHN ADAMS KNIGHT, both of No. 4, Symond's Inn, Chancery Lane, in the County of Middlesex, for an invention for—"Improvements in spring bed-bottoms."—*Partly a communication to them from abroad by Philip Ulmer, of New York.* *Letters Patent sealed.*

PENTZLIN.
29th March 1860.

808. AUGUST PENTZLIN, of Glasgow, in the County of Lanark, North Britain, Veneer and Marquetry Merchant, for an invention for—"Improvements in machinery for cutting wood."—*A communication to him from abroad by Theodor Andreas Prale, residing at Hamburgh.* *Letters Patent sealed.*

FARMER.
29th March 1860.

809. JAMES FARMER, of London, in the County of Middlesex, Cocoa and Chocolate Manufacturer, for an invention for—"Improvements in the manufacture of cocoa and chocolate." *Letters Patent sealed.*

HOLDEN.
29th March 1860.

810. ISAAC HOLDEN, of St. Denis, near Paris, in the Empire of France, for an invention for—"Improvements in means or apparatus for preparing and combing wool and other fibrous substances." *Letters Patent sealed.*

NORRIS.
TILL.
29th March 1860.

811. JOHN NORRIS, Junr., of Birmingham, in the County of Warwick, Nail Manufacturer, and THOMAS TILL, of the same place, Machinist, for an invention for—"Improvements in machinery to be used in the manufacture of wrought and horse nails." *Provisional protection only.*

COOPER.
29th March 1860.

812. BENJAMIN COOPER, of Frome, in the County of Somerset, Woollen Cloth Manufacturer, for an invention for—"Improvements in warping and beaming yarns preparatory to weaving." *Provisional protection only.*

MONKS.
29th March 1860.

813. JOHN MONKS, of James Street, Bethnal Green, in the County of Middlesex, Weaver, for an invention for—"Improved machinery for manufacturing chenille."
Letters Patent sealed.

DALE.
29th March 1860.

814. JOHN DALE, of Manchester, in the County of Lancaster, Manufacturing Chemist, for an invention for—"Improvements in obtaining albumen or analogous substance for use with pigments in calico printing and for other purposes."
Provisional protection only.

SMITH.
SMITH.
29th March 1860.

815. NATHANIEL SMITH, and ROBERT SMITH, both of Thrapston, in the County of Northampton, Agricultural Implement Makers, for an invention for—"Improvements in the construction of haymaking machines." *Letters Patent sealed.*

SAMPSON.
29th March 1860.

816. EDWARD BARNARD SAMPSON, of Stroud, in the County of Gloucester, for an invention for—"Improvements in condensing apparatus of carding-engines." *Provisional protection only.*

HAMILTON.
29th March 1860.

817. JOHN HAMILTON, Junior, of the Windsor Foundry and Ironworks, Liverpool, for an invention for—"Improvements in constructing and propelling vessels." *Letters Patent sealed.*

BUCHANAN.
29th March 1860.

818. JAMES BUCHANAN, of Glasgow, in the County of Lanark, North Britain, Gentleman, for an invention for—"Improvements in the manufacture and finishing of heddles or healds for weaving, and in the machinery or apparatus employed therein." *Letters Patent sealed.*

JOHNSON.
29th March 1860.

819. JOHN HENRY JOHNSON, of 47, Lincoln's Inn Fields, in the County of Middlesex, and of 166, Buchanan Street, in the City of Glasgow, North Britain, Gentleman, for an invention for—"Improvements in chronometers."—*A communication to him from abroad by Louis François Clément Bréguet, of Paris, in the Empire of France, Clockmaker.* *Provisional protection only.*

REIDY.
30th March 1860.

820. JAMES REIDY, of 27, Cook Street, in the City of Cork, Gas Fitter and Engineer, for an invention for—"A machine for breaking stones and other hard substances." *Letters Patent sealed.*

RICHARDSON.
30th March 1860.

821. WILLIAM RICHARDSON, of Dudley, in the County of Worcester, Gas Engineer, for an invention for—"Improvements in apparatus for the production of coal gas." *Letters Patent sealed.*

BREACH.
30th March 1860.

822. JOHN ROBERT BREACH, of Leeds, in the County of York, Woollen Cloth Merchant, for an invention for—"An improved household fire-escape." *Provisional protection only.*

BEAU.
30th March 1860.

823. PAUL ADOLPHE AUGUSTE BEAU, of Porchester Terrace, in the County of Middlesex, Gentleman, for an invention for—"A neomonoscope or apparatus for viewing photographic and other like pictures." *Provisional protection only.*

DAVIES.
PAINE.
30th March 1860.

824. JOHN DAVIES, and GEORGE PAINE, both of Truro, in the County of Cornwall, for an invention for—"Improvements in the manufacture of gun-powder." *Letters Patent sealed.*

CROSSKILL.
CROSSKILL.
30th March 1860.

825. ALFRED CROSSKILL, of Beverley, in the County of York, Engineer, and JAMES GAWAN CROSSKILL, of the same place, Machine Maker, for an invention for—"Improvements in reaping and mowing machines." *Letters Patent sealed.*

CHAMBERS.
30th March 1860.

826. WILLIAM MARTIN CHAMBERS, of Birmingham, in the County of Warwick, Metallic Bedstead Manufacturer, for an invention for—"An improvement or improvements in the method of and apparatus for straigthening angle iron and other bar iron of a trough like shape after if leaves the rolls and while still hot." *Letters Patent sealed.*

HASKARD.
DEAN.
DEAN.
30th March 1860.

827. SAMUEL BURTON HASKARD, of Wollaton Street, in the Town and County of the Town of Nottingham, Spring Point and Guide Manufacturer, and JOHN DEAN, and EDWARD DEAN, both of Radford, in the County of Nottingham, Mechanics, for an invention for—"Improvements in machinery for the manufacture of looped fabrics." *Letters Patent sealed.*

LAKIN.
WAIN.
30th March 1860.

828. ROBERT LAKIN, of Ardwick, in the Parish of Manchester, in the County of Lancaster, Machinist, and JOHN WAIN, of the City of Manchester, in the said County, Mechanic, for an invention for—"Improvements in machines for spinning and doubling cotton and other fibrous substances." *Letters Patent sealed.*

ESCHWEGE.
30th March 1860.

829. HERMANN ESCHWEGE, of Mincing Lane, in the City of London, for an invention for—"Improvements in the manufacture of gin or geneva." *Provisional protection only.*

CLARK.
31st March 1860.

830. DANIEL KINNEAR CLARK, of 11, Adam Street, Adelphi, in the County of Middlesex, Civil Engineer, for an invention for—"Improvements in steam-engines and boilers." *Letters Patent sealed.*

SHERIDAN. 31st March 1860.	**831.** JOHN SHERIDAN, of 55, John Street, Dean Street, Commercial Road East, for an invention for—"Improvements in the manufacture of sheet metal casks and other vessels." *Letters Patent sealed.*
STELZL. 31st March 1860.	**832.** ERNEST STELZL, of Nancy, in the Empire of France, Manufacturer, for an invention for—"Improvements in ornamenting surfaces of glass, wood, plaster and other materials, and in protecting them from the action of fire and moisture." *Complete specification; Letters Patent sealed.*
FARRINGTON. 31st March 1860.	**833.** GEORGE HENRY FARRINGTON, Wholesale Stationer, of Cross Lane, Cannon Street, in the City of London, for an invention for—An "Improvement in the manufacture of envelopes." *Provisional protection only.*
HUGHES. 31st March 1860.	**834.** EDWARD JOSEPH HUGHES, of the City of Manchester, in the County of Lancaster, Patent Agent, for an invention for—"Improvements in the manufacture of oil of turpentine and resin and in the apparatus connected therewith."—*A communication to him from abroad by James Napier, of Brooklyn, U. S. of America.* *Letters Patent sealed.*
CLAPHAM. CLAPHAM. 31st March 1860.	**835.** WILLIAM CLAPHAM, and JOHN HENRY CLAPHAM, both of Wilsden, in the Parish of Bradford, Yorkshire, Manufacturers, for an invention for—"An improvement in spinning applicable to various kinds of yarns." *Provisional protection only*
JEFFERSON. JEFFERSON. 31st March 1860.	**836.** RICHARD ALFRED JEFFERSON, of 30, North Street, St. John's Wood, in the County of Middlesex, Wood Carver, and MATTHEW JEFFERSON, of 49, Crown Street, Finsbury, in the County of Middlesex, Designer, for an invention for—"An improved construction of steam-engine applicable also to the raising of water." *Letters Patent sealed.*
EDGEWORTH. 31st March 1860.	**837.** THOMAS FRANCIS EDGEWORTH, of 147, Park Road, Toxteth Park, Liverpool, Surgeon, for an invention for—"Improvements in obtaining light." *Provisional protection only.*
JONES. JONES. 31st March 1860.	**838.** HENRY JONES, of Old Street, St. Luke's, in the County of Middlesex, and JOHN JONES, of St. Paul's Street, New North Road, in the County of Middlesex, Gas-Meter Manufacturers, for an invention for—"Improvements in wet gas meters." *Letters Patent sealed.*
JABUREK. 31st March 1860.	**839.** FRANZ JABUREK, of Vienna, in the Austrian Empire, Manufacturer, for an invention for—"An improved pipe for smoking." *Letters Patent sealed.*
DAHLL. 2nd April 1860.	**840.** TELLEF DAHLL, of Krageroe, in the Kingdom of Norway, Mineralogist, for an invention for—"An improvement in the separation of nickel and cobalt from magnetic pyrites and bisulphuret of iron or any other sulphur composition." *Provisional protection only.*
STARNES. 2nd April 1860.	**841.** JOHN SAMPSON STARNES, Lamp Maker, of Cock Hill, Ratcliff, London, for an invention for—"Improvements in signal and other lamps." *Letters Patent sealed.*
POWELL. 2nd April 1860.	**842.** HENRY BUCKWORTH POWELL, of Foxleize Park, Lyndhurst, Hants, for an invention for—"A moveable stud or button." *Provisional protection only.*
BROOMAN. 2nd April 1860.	**843.** RICHARD ARCHABALD BROOMAN, of 166, Fleet Street, in the City of London, Patent Agent, for an invention for—"Improvements in buttons."—*A communication to him from abroad by Henry Dollier, of Paris.* *Letters Patent sealed.*
PARTRIDGE. 2nd April 1860.	**844.** EBENEZER PARTRIDGE, of Stourbridge, in the County of Worcester, Engineer and Iron-founder, for an invention for—"Improvements in axles and axle boxes." *Provisional protection only.*
GAMBLE. ELLIS. 2nd April 1860.	**845.** THOMAS GAMBLE, and EDWIN ELLIS, both of Nottingham, for an invention for—"Improvements in the manufacture of fabrics of the description known as bobbin net." *Letters Patent sealed.*
JOHNSON. 2nd April 1860.	**846.** CECIL JOHNSON, of No. 6, Northumberland Street, Strand, in the County of Middlesex, for an invention for—"Improvements in the manufacture of shoes and boots." *Letters Patent sealed.*
ROBERTSON. 3rd April 1860.	**847.** JAMES ROBERTSON, of 3, Stainsby Road, East India Road, in the County of Middlesex, Cooper, for an invention for—"Improvements in the construction of furnaces or fire places." *Letters Patent sealed.*

HOULDSWORTH. 3rd April 1860.

848. WILLIAM HOULDSWORTH, of Bradford, in the County of York, for an invention for—"Improvements in machinery or apparatus for preparing cotton or other fibrous substances for spinning." *Letters Patent sealed.*

SIMPKIN. 3rd April 1860.

849. EDMUND SIMPKIN,, of Bury, in the County of Lancaster, for an invention for—"Improvements in couplings for carriages, wagons, and other vehicles on railways." *Provisional protection sealed.*

GILBEE. 3rd April 1860.

850. WILLIAM ARMAND GILBEE, of No. 4, South Street, Finsbury, London, Patent Agent, for an invention for—"An improved apparatus for making signals on railways."—*A communication to him from abroad by Joseph Desgabriel, of Lyons, France.* *Letters Patent sealed.*

WOODRUFF. 3rd April 1860.

851. PHILIP WOODRUFF, of Machen, in the County of Monmouth, Iron and Tin Plate Manufacturer, for an invention for—"An improvement in the manufacture of iron from the puddling furnace, for the purpose of rolling same into sheets intended to be coated with tin, lead or any other metal, applicable also to the manufacture of all other sorts of sheet or bar iron where toughness, strength and ductility are essential." *Provisional protection only.*

AMBLER. 3rd April 1860.

852. JOSEPH AMBLER, of Little Horton, in the Parish and Borough of Bradford, and County of York, Manufacturer, for an invention for—"Improvements in looms for weaving." *Provisional protection only.*

JONES. 3rd April 1860.

853. JOHN MASTERS JONES, of the Parish of Netheravon, in the County of Wilts, for an invention for—"An improved apparatus for generating steam." *Provisional protection only.*

GEDGE. 3rd April 1860.

854. WILLIAM EDWARD GEDGE, of the firm of John Gedge and Son, of No. 11, late 4, Wellington Street, Strand, in the County of Middlesex, Patent Agents, for an invention for—"Improvements in the construction and working of thrashing machines."—*A communication to him from abroad by Louis Jules Ganne, of Cour-Cheverney, France.* *Provisional protection only.*

RIMINGTON. RIMINGTON. 3rd April 1860.

855. WILLIAM RIMINGTON, and WILLIAM RIMINGTON, the younger, both of Skipton, in Craven, Yorkshire, Whitesmiths and Bellhangers, for an invention for—"Improvements in box hinges for swing doors." *Letters Patent sealed.*

WALKER. 3rd April 1860.

856. CHARLES VINCENT WALKER, of Fern-side Villa, Redhill, in the County of Surrey, for an invention for—"Improvements in the manufacture of troughs for receiving electric telegraph wires." *Provisional protection only.*

SCHLOSS. 3rd April 1860.

857. JOSEPH SCHLOSS, of Cannon Street, in the City of London, Manufacturer, for an invention for—"An improved plug for smoking-pipes." *Letters Patent sealed.*

HOPE. 3rd April 1860.

858. DAVID GRAHAM HOPE, of Manchester, in the County of Lancaster, Civil Engineer, for an invention for—"Improvements in slide valves of locomotive and other steam-engines, and in gearing for working them." *Provisional protection only.*

JENSEN. 3rd April 1860.

859. ANTHON NICOLAY JENSEN, of 3, Chambers Terrace, Malden Road, Haverstock Hill, London, in the County of Middlesex, Operating Brewer and Distiller, for an invention for—"Improvements in brewing worts from saccharine and farinaceous substances, with a new method of retaining the aroma and better qualities of the hops, forming an infallibly keeping ale nearly white and admitting of aëration, part of which improvements is applicable to distillers' wash, vinegar making, and preserving fermentable liquors." *Letters Patent sealed.*

MELLOR. GEE. 4th April 1860.

860. HENRY MOSES MELLOR, of Arkwright Street, in the Town and County of the Town of Nottingham, Machine Builder, and JOSEPH GEE, of Radford, in the County of Nottingham, Mechanic, for an invention for—"Improvements in machinery for the manufacture of looped fabrics." *Provisional protection only.*

INGRAM. 4th April 1860.

861. THOMAS INGRAM, of Bradford, in the County of York, for an invention for—"Improvements in looms for weaving." *Letters Patent sealed.*

PULLAN. CRESSWELL. 4th April 1860.

862. ABRAHAM PULLAN, of Fortie Cottage, New Cross, in the County of Kent, Engineer, and THOMAS CRESSWELL, of Ravensbourne Terrace, Lewisham, in the same County, Engineer, for an invention for—"Improvements in the construction of steam, water and other fluid gauges." *Letters Patent sealed.*

ASHCROFT.
4th April 1860.

863. EDWARD HALLIDAY ASHCROFT, of Boston, in the State of Massachusetts, of the United States of America, for an invention for—"An improved hand drill stock."—*Partly a communication to him by Henry H. Packer, of Boston, in the State of Massachusetts.* *Complete specification; Letters Patent sealed.*

MALLINSON.
5th April 1860.

864. GEORGE MALLINSON, of Salford, in the County of Lancaster, Pattern Designer, for an invention for—"Improvements in the manufacture of woven fabrics." *Letters Patent sealed.*

BROWN.
JEFFERY.
5th April 1860.

865. WILLIAM FULFORD BROWN, of Westgate Street, Gloucester, and WALTER JEFFERY, of Eastgate Street, Gloucester, for an invention for—"A more convenient and effectual method of attaching and securing brooches and such like articles, and for improved fastenings to be used therewith and for other purposes." *Provisional protection only.*

DELAFIELD.
5th April 1860.

866. EDWARD THOMAS DELAFIELD, of Brussels, in the Kingdom of Belgium, for an invention for—"Improved apparatus and processes for decomposing neutral fatty bodies or matters into fatty acids and glycerine, and for the distillation thereof."—*A communication to him from abroad by Louis Martin, of No. 209, Rue Saint Jacques, Paris.* *Letters Patent sealed; no specification filed.*

WHITE.
5th April 1860.

867. ARCHIBALD WHITE, of Great Missenden, in the County of Buckingham, Gentleman, for an invention for—"Lifting at one lift a load of corn, hay, straw or manure, or of other things." *Letters Patent sealed.*

LEUCHARS.
5th April 1860.

868. WILLIAM LEUCHARS, of No. 38, Piccadilly, in the County of Middlesex, Dressing Case Manufacturer, for an invention for—"Improvements in portable ink-holders and match boxes." *Letters Patent sealed.*

FULLER.
DAVIDSON.
5th April 1860.

869. JOHN HOBSON FULLER, of 70, Hatton Garden, in the County of Middlesex, Tool Manufacturer, and WILLIAM DAVIDSON, of Wisbeach, in the County of Cambridge, Gas Fitter, for an invention for—"An apparatus for cutting or screwing pipes and round metal." *Letters Patent sealed.*

ROLA.
5th April 1860.

870. VINCENT ROLA, of Southampton, Professor of Music, for an invention for—"Improvements in musical notation or symbolizing musical sounds to be printed or represented on paper or other material, with a view to facilitate the reading of music." *Letters Patent sealed.*

WILSON.
5th April 1860.

871. JOSHUA HENRY WILSON, of Cornholme Mill, near Todmorden, in the County of Lancaster, Bobbin Manufacturer, for an invention for—"Certain improvements in machinery to be applied in the manufacture of bobbins used in the preparing and spinning of fibrous materials." *Letters Patent sealed.*

PARSONS.
5th April 1860.

872. WILLIAM PARSONS, of Pont-ar-Tawe, Swansea, for an invention for—"Improvements in the manufacture of wrought iron." *Letters Patent sealed.*

DUSAUTOY.
5th April 1860.

873. CHARLES DUSAUTOY, of Laverstoke, in the County of Southampton, Paper Maker, for an invention for—"Improvements in apparatus used in the manufacture of paper." *Letters Patent sealed; no specification filed*

JOHNSON.
5th April 1860.

874. JOHN HENRY JOHNSON, of 47, Lincoln's Inn Fields, in the County of Middlesex, and of 166, Buchanan Street, in the City of Glasgow, North Britain, Gentleman, for an invention for—"A new metallic alloy."—*A communication to him from abroad by Messieurs Charles Noel and Company, of Paris, in the Empire of France, Metallurgists.* *Letters Patent sealed.*

SMITH.
5th April 1860.

875. JOHN SMITH, of Birmingham, in the County of Warwick, Manufacturer, for an invention for—"Improvements in the manufacture of buttons and other dress fastenings." *Letters Patent sealed.*

NEWTON.
5th April 1860.

876. ALFRED VINCENT NEWTON, of the Office for Patents, 66, Chancery Lane, in the County of Middlesex, Mechanical Draughtsman, for an invention for—"Improvements in the construction of pressure gauges."—*A communication to him from abroad by T. Wilson Lane, of Meredith, New Hampshire, United States of America.* *Letters Patent sealed.*

NEWTON.
5th April 1860.

877. ALFRED VINCENT NEWTON, of the Office for Patents, 66, Chancery Lane, in the County of Middlesex, Mechanical Draughtsman, for an invention for—"An improved arrangement of parts for supplying steam to steam-engines."—*A communication to him from abroad by Lucius J. Knowles, of Warren, Massachusetts, United States of America.* *Letters Patent sealed.*

HENRY. 5th April 1860.

878. MICHAEL HENRY, of 84, Fleet Street, in the City of London, Patent Agent, for an invention for—"Improvements in the mode of and apparatus for obtaining motive-power."—*A communication to him from abroad by Henry François Cohade, of 33, Boulevart Saint Martin, Paris, France.* *Letters Patent sealed.*

CARTER. 7th April 1860.

879. HENRY CARTER, of the City of Manchester, in the County of Lancaster, Gas Engineer, for an invention for—"Improvements in machinery or apparatus for making gas burners." *Letters Patent sealed.*

CLARK. 7th April 1860.

880. WILLIAM CLARK, of 53, Chancery Lane, in the County of Middlesex, Engineer and Patent Agent, for an invention for—"Improvements in fire-arms."—*A communication to him from abroad by "The Star Arms Company," of the City, County, & State of New York, U. S. A.* *Letters Patent sealed.*

CLARK. 7th April 1860.

881. WILLIAM CLARK, of 53, Chancery Lane, in the County of Middlesex, Engineer and Patent Agent, for an invention for—"Improvements in axles or journals in combination with lubricating axle boxes for railway and other carriages."—*A communication to him from abroad by Mr. James Hervey Denning, of Paris, in the Empire of France, Gentleman.* *Letters Patent sealed.*

CLARK. 7th April 1860.

882. WILLIAM CLARK, of 53, Chancery Lane, in the County of Middlesex, Engineer and Patent Agent, for an invention for—"Improved apparatus for treating peat or turf."—*A communication to him from abroad by Auguste Marcelin, Count de Lara et du Ren, of Paris, in the Empire of France.* *Letters Patent sealed.*

HALL. 9th April 1860.

883. HIRAM LYMAN HALL, of 6, Upper Bedford Place, in the County of Middlesex, Manufacturer, for an invention for—"Improvements in the manufacture of india-rubber cloth, japanned and leather cloths, and in the machinery or apparatus employed therein." *Letters Patent sealed.*

SPRYE. 9th April 1860.

884. COURTENAY SPRYE, of No. 120, New Bond Street, in the County of Middlesex, Gentleman, for an invention for—"An improved disengaging hook." *Provisional protection only.*

HOWAT. 9th April 1860.

885. ANDREW HOWAT, of Farnworth, near Bolton-le-Moors, in the County of Lancaster, Brassfounder, for an invention for—"Certain improvements in miners' safety lamps." *Provisional protection only.*

HAMER. 9th April 1860.

886. JOB HAMER, of Longsight, in the Parish of Manchester, and County of Lancaster, Mercantile Clerk, for an invention for—"An improved manufacture of rugs, quilts, coverlets or covers for beds, and of certain articles of wearing-apparel." *Letters Patent sealed.*

BRIDLE. 9th April 1860.

887. HENRY BRIDLE, of Bridport, in the County of Dorset, Plumber and Coppersmith, for an invention for—"Improvements in refrigerators." *Letters Patent sealed.*

BIEHLER. 9th April 1860.

888. GUSTAVE BIEHLER, of the Town of Salins, in the Department of the Jura, in the Empire of France, Gentleman, for an invention for—"An improved apparatus to be employed for blasting rocks, and the application of the same to the formation of tunnels." *Complete specification; protection for SIX months only.*

PARKER. HARRISON. 9th April 1860.

889. THOMAS PARKER, of Blackburn, in the County of Lancaster, Taper, and GEORGE HARRISON, of Burnley, in the said County, Overlooker, for an invention for—"Improvements in self-acting mules." *Letters Patent sealed.*

JOHNSON. 9th April 1860.

890. JOHN HENRY JOHNSON, of 47, Lincoln's Inn Fields, in the County of Middlesex, and of 166, Buchanan Street, in the City of Glasgow, North Britain, Gentleman, for an invention for—"Improvements in pumps for compressing elastic fluids."—*A communication to him from abroad by Germain Sommeiller, of Turin, in the Kingdom of Sardinia, Engineer.* *Letters Patent sealed.*

AVELING. 9th April 1860.

891. THOMAS AVELING, of Rochester, in the County of Kent, Agricultural Engineer, for an invention for—"Improvements in locomotive engines." *Letters Patent sealed.*

BROOMAN. 9th April 1860.

892. RICHARD ARCHIBALD BROOMAN, of 166, Fleet Street, in the City of London, Patent Agent, for an invention for—"A new woven fabric and method of manufacturing the same."—*A communication to him from abroad by Louis Nicolas Guillaume Dupont, of Louviers, France.* *Provisional protection only.*

EIDLITZ. 9th April 1860.

893. LEOPOLD EIDLITZ, of New York, United States of America, Architect, for an invention for—"Improvements in producing printing and other irregular surfaces by the aid of photography." *Provisional protection only.*

PEACOCK. GARSTANG. 10th April 1860.

894. JACOB PEACOCK, of Blackburn, in the County of Lancaster, Agent, and JOHN GARSTANG, of Preston, in the said County, Over-looker of Power Looms, for an invention for—"Improvements in looms for weaving." *Provisional protection only.*

REPELIN. 10th April 1860.

895. LOUIS JOSEPH REPELIN, of St. Marcellin, Department of the Isère, in the Empire of France, for an invention for—"An expeditious mode of tanning." *Letters Patent sealed.*

HEYWOOD. 10th April 1860.

896. EDWIN HEYWOOD, of Haley Hill, Halifax, in the County of York, for an invention for—"Improvements in means or apparatus employed in winding yarns." *Letters Patent sealed.*

TYRRELL. 10th April 1860.

897. HARRY TYRRELL, of High Street, Lymington, in the County of Southampton, Builder, for an invention for—"An improved article of furniture." *Provisional protection NOT granted.*

NEWTON. 10th April 1860.

898. WILLIAM EDWARD NEWTON, of the Office for Patents, 66, Chancery Lane, in the County of Middlesex, Civil Engineer, for an invention for—"Improved apparatus for superheating steam."—*A communication to him from abroad by Benjamin Normand, of Havre, in the Empire of France.* *Letters Patent sealed.*

RIGBY. NORMAN. 10th April 1860.

899. JOHN RIGBY, of the City of Dublin, Ireland, Gunmaker, and WILLIAM NICHOLAS NORMAN, of said City of Dublin, Gentleman, for an invention for—"Improvements in guns and other fire-arms, and in cartridges to be used therewith." *Letters Patent sealed.*

RANKIN. 10th April 1860.

900. JOHN RANKIN, of the Union Foundry, in Liverpool, in the County of Lancaster, Iron-founder, for an invention for—"Improvements in mills for grinding bones." *Letters Patent sealed.*

GARDRAT. 11th April 1860.

901. PIERRE ARISTIDE GARDRAT, of Brussels, in the Kingdom of Belgium, and 4, South Street, Finsbury, London, for an invention for—"Improvements in the cleaning of the waste of wool, silks, cottons, and flax." *Provisional protection only.*

SPENCE. SPENCE. 11th April 1860.

902. HENRY SPENCE, Lacquer Manufacturer, of Birmingham, in the County of Warwick, and JOSEPH GEORGE SPENCE, also of Birmingham, aforesaid, Son of the said Henry Spence, and Superintendent of the Lacquer Manufactory, for an invention for—"Certain improvements in the manufacture of lacquer." *Letters Patent sealed; no specification filed.*

ATKINSON. 11th April 1860.

903. ROBERT ATKINSON, of the firm of Robert Atkinson & Co., of Southampton Court, Tottenham Court Road, in the County of Middlesex, for an invention for—"Improvements in chimney tops." *Letters Patent sealed.*

TURNER. 11th April 1860.

904. THOMAS ALLEN TURNER, of Birmingham, in the County of Warwick, Currier and Leather Dealer, for an invention for—"An improvement or improvements in manufacturing the upper leathers of boots and shoes." *Letters Patent sealed.*

DENNIS. 11th April 1860.

905. THOMAS HUNGATE PRESTON DENNIS, of Chelmsford, in the County of Essex, Ironmonger, for an invention for—"Improvements in the construction of iron buildings or glazed structures for horticultural or other purposes." *Letters Patent sealed.*

KERSHAW. 11th April 1860.

906. JOSEPH KERSHAW, of Allerton, near Bradford, in the County of York, Overlooker, for an invention for—"Improvements in means or apparatus used in weaving." *Letters Patent sealed.*

BURRUP. 11th April 1860.

907. JOSEPH BURRUP, of Gloucester, in the County of Gloucester, Smith, for an invention for—"An improvement in ploughs." *Provisional protection only.*

ROGERS. 11th April 1860.

908. JASPER WHEELER ROGERS, of Peat House, Roberts Town, in the County of Kildare, Engineer, for an invention for—"Improved means of and apparatus for collecting the excrement of towns and villages, and for facilitating the drainage of houses." *Provisional protection only.*

MARTIN. 11th April 1860.

909. THOMAS MARTIN, of Withybush, Haverfordwest, in the County of Pembroke, Clerk, for an invention for—"Improvements in the construction of roofs." *Letters Patent sealed.*

HILLEL.
11th April 1860.

910. JULES FERDINAND HILLEL, of Mark Lane, City of London, Merchant, for an invention for—"Improvements in the apparatus and in the mode of treating Spanish grass and other fibrous materials to be used in the manufacture of paper pulp." *Letters Patent sealed.*

WESTMORELAND.
WESTMORELAND.
11th April 1860.

911. EDWIN WESTMORELAND, and WILLIAM WESTMORELAND, both of Newdegate Street, in the Town and County of the Town of Nottingham, Mechanists, for an invention for—"Improvements in sewing-machines." *Letters Patent sealed.*

NEWBOLD.
12th April 1860.

912. CHARLES NEWBOLD, of Nottingham, Manufacturer, for an invention for—"Improvements in machinery or apparatus for and the method of manufacturing vessels and other articles." *Letters Patent sealed.*

WEBB.
12th April 1860.

913. JOHN WEBB, of St. Austell, in the County of Cornwall, for an invention for—"Improvements in the cartridges employed in blasting." *Letters Patent sealed.*

DRUKKER.
12th April 1860.

914. MEYER DRUKKER, of 47, London Wall, in the City of London, Swiss Clock Manufacturer, for an invention for—"Improvements in clocks." *Letters Patent sealed.*

ADDENBROOKE.
LEWIS.
12th April 1860.

915. GEORGE ADDENBROOKE, of Green Hill, Womburn, near Wolverhampton, Iron Master, and FREDERICK LEWIS, of Pen Fields, near Wolverhampton, aforesaid, for an invention for—"Improvements in apparatus used in raising and lowering weights in mine shafts." *Letters Patent sealed; no specification filed.*

TROTMAN.
TROTMAN.
12th April 1860.

916. THOMAS TROTMAN, of Sheerness, in the County of Kent, Engineer, and ADOLPHUS TROTMAN, of Beresford Street, Walworth, in the County of Surrey, Pin Maker, for an invention for—"Improved apparatus to be used in cleaning windows." *Provisional protection only.*

BUSHELL.
BUSHELL.
BUSHELL.
BUSHELL.
BUSHELL.
12th April 1860.

917. JONAS BUSHELL, WILLIAM BUSHELL, SAMUEL BUSHELL, JOSEPH BUSHELL, and DANIEL BUSHELL, all of Great Snoring, near Fakenham, in the County of Norfolk, for an invention for—"An improved agricultural machine." *Letters Patent sealed.*

SMITH.
12th April 1860.

918. HUGH SMITH, of the firm of Smith Brothers and Company, Engineers and Millwrights, of Glasgow, in the County of Lanark, North Britain, for an invention for—"Improvements in machinery for cutting wood." *Letters Patent sealed.*

ROGERS.
12th April 1860.

919. JASPER WHEELER ROGERS, of Peat House, Roberts Town, in the County of Kildare, Engineer, for an invention for—"An improved mode of draining peat mosses so as to render the peat obtained therefrom more useful as fuel, also improved means of and apparatus for drying and preparing the peat for fuel." *Provisional protection only.*

PETRIE.
12th April 1860.

920. JOHN PETRIE, Junior, of Rochdale, in the County of Lancaster, Machinist, for an invention for—"Improvements in machinery or apparatus for washing rags and other materials used in the manufacture of paper." *Provisional protection only.*

VANDENBURGH.
13th April 1860.

921. ORIGEN VANDENBURGH, of the City of Syracuse, and State of New York, temporarily residing in London, for an invention for—"Improvements in projectiles and appliances of projection, imparting great precision and great range of flight to projectiles forced through the air by gunpowder or other explosive compound, with facility for rapid discharge and for discharging many projectiles simultaneously by one projecting appliance, with the same advantages giving increased area to the space covered by the destructive projectile matter, and light weight and small space to the appliance for projection." *Letters Patent sealed.*

PLATT.
13th April 1860.

922. JOHN PLATT, of Oldham, in the County of Lancaster, Mechanical Engineer, for an invention for—"Improvements in mules for spinning and doubling." *Letters Patent sealed.*

HILL.
13th April 1860.

923. JOSEPH HILL, of Ipswich, in the County of Suffolk, Wire Worker, for an invention for—"Improvements in wire screens." *Letters Patent sealed.*

BAMLETT.
13th April 1860.

924. ADAM BAMLETT, of Middleton Tyas, in the County of York, Farmer, for an invention for—"Improvements in reaping and mowing machines, and in implements connected therewith." *Letters Patent sealed.*

HADWEN.
13th April 1860.

925. JOHN WILSON HADWEN, of Kebroyd Mills, in the Parish of Halifax, and West Riding of the County of York, Cotton Spinner, for an invention for—"Improvements in machinery or apparatus for combing or cleaning silk, cotton, wool and other fibrous substances." *Provisional protection only.*

MITCHELL.
MITCHELL.
EMMERSON.
13th April 1860.

926. ABRAHAM MITCHELL, and JOSEPH MITCHELL, of Bradford, in the County of York, Spinners and Manufacturers, and BENJAMIN EMMERSON, of the same place, Overlooker, for an invention for—"Improvements in looms for weaving." *Letters Patent sealed.*

CROSSLEY.
CROSSLEY.
13th April 1860.

927. JAMES WILLIAM CROSSLEY, of Brighouse, in the County of York, Dyer and Finisher, and JOHN CROSSLEY, of Halifax, in the same County, Machine Maker, for an invention for—"Improvements in the construction of singe-plates, which improvements are also applicable to gas and other retorts." *Letters Patent sealed.*

BURGESS.
13th April 1860.

928. WILLIAM BURGESS, of Newgate Street, in the City of London, Agricultural Implement Manufacturer, for an invention for—"An improvement in mowing and reaping machines." *Letters Patent sealed; no specification filed.*

FRY.
13th April 1860.

929. THOMAS FRY, of Brooklyn, in the County of Kings, and State of New York, in the United States of America, for an invention for—"Improvement in castors for chairs and other like articles of furniture." *Letters Patent sealed.*

EDWARDS.
13th April 1860.

930. THOMAS EDWARDS, of Great Tindal Steeet Works, Birmingham, in the County of Warwick, Engineer, for an invention for—"Improvements in obtaining motive-power." *Provisional protection only.*

DUBOIS.
13th April 1860.

931. LOUIS DUBOIS, of Brussels, in the Kingdom of Belgium, Merchant, for an invention for—"Improvements in printing-rollers." *Provisional protection only.*

HUGHES.
14th April 1860.

932. EDWARD JOSEPH HUGHES, of the City of Manchester, in the County of Lancaster, Patent Agent, for an invention for—"Improvements in machinery or apparatus for sewing."—*A communication to him from abroad by James Wilcox, of New York, and Edward Howard, of Norfolk County, Massachusetts, U.S. of America.* *Letters Patent sealed.*

BRÉMOND.
THUILLIEZ.
14th April 1860.

933. JEAN JOSEPH LOUIS BRÉMOND, and LOUIS ZÉPHIRIN THUILLIEZ, of 29, Boulevart St. Martin, Paris, Gentleman, for an invention for—"Improvements in spindles and other parts of spinning looms." *Letters Patent sealed.*

NOTMAN.
14th April 1860.

934. JOHN NOTMAN, of Plumtree Street, in the Town and County of the Town of Nottingham, Joiner and Builder, for an invention for—"Improvements in sewing-machines and in the apparatus connected therewith."—*A communication to him from abroad by James Clough Cropper, of Broadway, New York.* *Letters Patent sealed.*

MENNONS.
14th April 1860.

935. MARC ANTOINE FRANÇOIS MENNONS, of the British and Foreign Patent Offices, 39, Rue de l'Echiquier, Paris, in the Empire of France, for an invention for—"Improvements in the production of motive-power and in the apparatus connected therewith."—*A communication from Jacques Belou, resident at Lyons, Civil Engineer.* *Complete specification; Letters Patent sealed.*

MENNONS.
14th April 1860.

936. MARC ANTOINE FRANÇOIS MENNONS, of the British and Foreign Patent Offices, 39, Rue de l'Echiquier, Paris, in the Empire of France, for an invention for—"An improved setting for lamp reflectors."—*A communication from Messrs. Gustave and Adrien Künkler, residing in Paris.* *Provisional protection only.*

FONTENAU.
14th April 1860.

937. FELIX FONTENAU, of No. 39, Rue de l'Echiquier, Paris, in the Empire of France, Gentleman, for an invention for—"An apparatus for the preservation of life and property in cases of shipwreck." *Letters Patent sealed.*

BOULARD.
14th April 1860.

938. LAURENT MARIE BOULARD, of 39, Rue de l'Echiquier, Paris, in the Empire of France, Gentleman, for an invention for—"An improved apparatus for preventing or destroying incrustations in steam-boilers." *Letters Patent sealed.*

JONES.
14th April 1860.

939. ABRAHAM JONES, of Manchester, in the County of Lancaster, Pattern Maker, for an invention for—"Improvements in machinery or apparatus for making rivets, screw blanks and other such articles." *Letters Patent sealed.*

PETRIE.
14th April 1860.

940. JOHN PETRIE, Junior, of Rochdale, in the County of Lancaster, Machinist, for an invention for—"Improvements in machinery or apparatus for drying warps for weaving." *Letters Patent sealed.*

FISHER.
FISHER.
14th April 1860.

941. THOMAS FISHER, and EDWARD FISHER, of Wednesfield, in the County of Stafford, Engineers, for an invention for—"Improvements in steam engines."
Provisional protection only.

NEWTON.
14th April 1860.

942. ALFRED VINCENT NEWTON, of the Office for Patents, 66, Chancery Lane, in the County of Middlesex, Mechanical Draughtsman, for an invention for—"Improvements in rotating breech fire-arms."—*A communication to him from abroad by Edward Savage, of Cromwell, in the County of Middlesex, and State of Connecticut, United States of America.* *Provisional protection only.*

LILLIE.
14th April 1860.

943. Sir JOHN SCOTT LILLIE, Companion of the Most Honorable Order of the Bath, of No. 105, Pall Mall, in the County of Middlesex, for an invention for—"Improvements in carriage ways." *Letters Patent sealed.*

WILSON.
HACKER.
14th April 1860.

944. CHARLES EDMUND WILSON, Manufacturer, and HENRY GEORGE HACKER, Warehouseman, both of Monkwell Street, in the City of London, for an invention for—"Improvements in machinery for the manufacture of chenille."
Provisional protection only.

PARTRIDGE.
14th April 1860.

945. DAVID PARTRIDGE, of Woolwich, in the County of Kent, Engineer, for an invention for—"An improvement in or addition to apparatuses for superheating steam." *Provisional protection only.*

RICHARD.
16th April 1860.

946. ALBERT C. RICHARD, of the City of New York, in the United States of America, for an invention for—"The manufacture of improved machine belting and apparatus connected therewith." *Provisional protection only.*

BROUGH.
COX.
16th April 1860.

947. ROBERT BROUGH, Engineer, of Cumberland Terrace, Camp Hill, Birmingham, in the County of Warwick, and RICHARD COX, Engineer, of Kingston Road, Birmingham, aforesaid, for an invention for "Certain improvements in machinery for the manufacture of spikes, nails, pins and rivets, and which said improvements are also applicable for partially forming or making chain links, holdfasts, staples, spouting-hooks, and other such like articles formed of iron or other metal by forging, pressing, rolling, or drawing." *Provisional protection only.*

BROGLIA.
POUCHAUT.
16th April 1860.

948. CHARLES BROGLIA, and PEDRO POUCHAUT, both of Clerkenwell, in the County of Middlesex, for an invention for—"An improved apparatus to be employed in the roasting and preparation of coffee, cocoa, and chicory."
Provisional protection only.

BURSTALL.
16th April 1860.

949. THOMAS BURSTALL, of Southall, in the County of Middlesex, Civil Engineer, for an invention for—"Improved machinery for manufacturing bricks from clay alone or mixed with other materials." *Letters Patent sealed.*

MUNTZ.
16th April 1860.

950. WILLIAM HENRY MUNTZ, of Millbrook, in the County of Hants, for an invention for—"Improvements in the construction of floating piers."
Letters Patent sealed; no specification filed.

WALKER.
16th April 1860.

951. THOMAS WALKER, of Birmingham, in the County of Warwick, Engineer, for an invention for—"Improvements in apparatus for indicating the height of water in steam-boilers." *Letters Patent sealed.*

SMITH.
16th April 1860.

952. WILLIAM SMITH, of Kennington Row, Kennington Park, in the County of Surrey, Gas Engineer, for an invention for—"Improvements in paving or covering roads and other ways." *Letters Patent sealed.*

CARPENTIER.
16th April 1860.

953. JEAN BAPTISTE AUGUSTE CARPENTIER, of Boulogne sur Mer, in the Empire of France, Inspector of Primary Instruction, at Boulogne sur Mer, for an invention for—"A new metrical apparatus with table."
Complete specification; Letters Patent sealed.

FITZ GERALD.
BATE.
16th April 1860.

954. DESMOND GERALD FITZ GERALD, of Cambridge Street, in the County of Middlesex, Gentleman, and GEORGE BATE, of Great George Street, in the City of Westminster, Civil Engineer, for an invention for—"An improved method of igniting the charge in ordnance and other fire-arms." *Letters Patent sealed.*

NEWTON.
16th April 1860.

955. WILLIAM EDWARD NEWTON, of the Office for Patents, 66, Chancery Lane, in the County of Middlesex, Civil Engineer, for an invention for—"Improved nippers for attaching blocks and tackles to ropes."—*A communication to him from abroad by William Henry Allen, and Andrew Jackson Bentley, both of New York, in the United States of America.* *Letters Patent sealed.*

ACCARAIN.
16th April 1860.

956. ALBERT ACCARAIN, Managing Director of the Société de Dolhain, of Limbourg, in the Kingdom of Belgium, for an invention for—"Improvements in treating ores of zinc and in the apparatus employed therein."
Letters Patent sealed; no specification filed.

CLARK.
16th April 1860.

957. WILLIAM CLARK, of 53, Chancery Lane, in the County of Middlesex, Engineer and Patent Agent, for an invention for—"Improvements in breech loading fire-arms and in projectiles, as also in apparatus for reducing ordinary guns to condition suitable for such improvements in fire-arms, which apparatus is also applicable for other purposes."—*A communication to him from abroad by Messrs. Hugo Frédéric Forbes, ex-Captain of Engineers, and Jean François Félix Challeton, Civil Engineer, both of Paris.* *Letters Patent sealed.*

TURNER.
16th April 1860.

958. THOMAS TURNER, Gun Manufacturer, of Fisher Street, Birmingham, in the County of Warwick, for an invention for—"Certain improvements in rifling applicable to either breech or muzzle loading fire-arms or ordinance."
Letters Patent sealed.

STEVENS.
17th April 1860.

959. CHARLES STEVENS, Manager of the British and Foreign Office for Patents, No. 1B, Welbeck Street, Cavendish Square, in the County of Middlesex, for an invention for—"An improved steam mill."—*A communication to him from abroad by Hypolitte Durand, of Bordeaux, in the Empire of France.* *Letters Patent sealed.*

VAUGHAN.
VAUGHAN.
VAUGHAN.
17th April 1860.

960. CHARLES VAUGHAN, of Birmingham, in the County of Warwick, and WILLIAM JAMES VAUGHAN, of Birmingham, aforesaid, and RICHARD VAUGHAN, of Birmingham, aforesaid, Manufacturers and Copartners, for an invention for—"Improvements in the manufacture of hoes." *Letters Patent sealed.*

JOHNSON.
17th April 1860.

961. JOHN HENRY JOHNSON, of 47, Lincoln's Inn Fields, in the County of Middlesex, and of 166, Buchanan Street, in the City of Glasgow, North Britain, Gentleman, for an invention for—"Improvements in caloric engines."—*A communication to him from abroad by Milton A. Whipple, of Boston, in the United States of America.* *Letters Patent sealed.*

PATTERSON.
17th April 1860.

962. JOHN PATTERSON, of Beverley, in the County of York, Engineer, for an invention for—"Improvements in apparatus for churning, which apparatus is also applicable to the washing of clothes and other articles." *Letters Patent sealed.*

HANSEMANN.
17th April 1860.

963. GUSTAV HANSEMANN, of Eupen, Prussia, for an invention for—"Improvements in machinery for spinning yarns." *Letters Patent sealed.*

ADCOCK.
17th April 1860.

964. HENRY ADCOCK, of the City Road, in the County of Middlesex, for an invention for—"Improvements in puddling, balling and mill furnaces."
Provisional protection only.

CARMONT.
CORBETT.
17th April 1860.

965. WILLIAM CARMONT, of Clayton, near Manchester, in the County of Lancaster, and WILLIAM CORBETT, of the same place, Iron and Steel Manufacturers, for an invention for—"An improvement in casting steel tyres for wheels, which is also applicable to casting other articles of steel." *Provisional protection only.*

CHEETHAM.
17th April 1860.

966. SAMUEL CHEETHAM, of Manchester, in the County of Lancaster, Engineer, for an invention for—"Certain improvements in 'cop tubes.'"
Letters Patent sealed.

BRIDGETT.
17th April 1860.

967. WILLIAM BRIDGETT, of New Lenton, in the County of Nottingham, Engineer, for an invention for—"The regeneration and expansion of steam applicable to steam-engines or for other purposes." *Letters Patent sealed.*

DE IONGH.
17th April 1860.

968. CHARLES DE IONGH, of Lautenbach, near Guebwiller, in the Empire of France, Manufacturer, for an invention for—"An improved mode of mounting the needles, points and guides used in knitting and lace machinery."
Provisional protection only.

NEWTON.
17th April 1860.

969. WILLIAM EDWARD NEWTON, of the Office for Patents, 66, Chancery Lane, in the County of Middlesex, Civil Engineer, for an invention for—"An improvement in pianofortes."—*A communication to him from abroad by Spencer Bartholomew Driggs, of New York, in the United States of America.* *Letters Patent sealed.*

CANOUIL.
18th April 1860.

970. GERMAIN CANOUIL, of No. 93, Curtain Road, Shoreditch, in the County of Middlesex, Chemist, for an invention for—"Improved compositions for priming percussion caps, and a machine or apparatus employed therein."
Provisional protection only.

SHAW.
COOK.
18th April 1860.

971. JOHN SHAW, Manufacturer, and JOHN COOK, Taper, of Accrington, in the County of Lancaster, for an invention for—"Improvements in looms."
Letters Patent sealed.

BROOMAN.
18th April 1860.

972. RICHARD ARCHIBALD BROOMAN, of 166, Fleet Street, in the City of London, Patent Agent, for an invention for—"A method of and apparatuses for communicating to railway passengers the names of the stations which the train successively approaches."—*A communication to him from abroad by Alfred de Banville, and Emile Duclos, of Marseilles.* *Provisional protection only.*

DURHAM.
18th April 1860.

973. GEORGE WILSON DURHAM, of Size Lane, in the City of London, Paper Maker, for an invention for—"Improvements in machines for washing rags, pulp and other fibrous materials." *Provisional protection only.*

FOWLER.
WORBY.
GREIG.
18th April 1860.

974. JOHN FOWLER, Junior, of Cornhill, WILLIAM WORBY, of Ipswich, and DAVID GREIG, of New Cross, Deptford, for an invention for—"Improvements in tilling land and in actuating agricultural implements by steam power, and in apparatus employed therein."—*The result partly of communication from abroad made to them by Messrs. Schubart and Hesse, of Dresden, and partly of invention and discovery made by themselves.* *Letters Patent sealed.*

PAYNE.
18th April 1860.

975. HENRY PAYNE, of Saint James' Road, Old Kent Road, in the County of Surrey, Engineer, for an invention for—"Improvements in lowering ships'-boats."
Provisional protection only.

DAVENPORT.
18th April 1860.

976. WALTER DAVENPORT, of No. 7, Bread Street, in the City of London, for an invention for—"Improvements in roller window blinds."
Provisional protection only.

NEWTON.
18th April 1860.

977. WILLIAM EDWARD NEWTON, of the Office for Patents, 66, Chancery Lane, in the County of Middlesex, Civil Engineer, for an invention for—"Improvements in pressing bonnets, bonnet frames and similar articles."—*A communication to him from abroad by Mary Jane Osborn, Executrix of William Osborn, deceased, of Louisville, in the State of Kentucky, United States of America.* *Letters Patent sealed.*

BYRN.
18th April 1860.

978. MARCUS LAFAYETTE BYRN, of the City and State of New York, United States of America, Doctor of Medicine, for an invention for—"An improvement in cork screws." *Provisional protection only.*

NEWTON.
18th April 1860.

979. WILLIAM EDWARD NEWTON, of the Office for Patents, 66, Chancery Lane, in the County of Middlesex, Civil Engineer, for an invention for—"Improved means of illuminating buoys, finger or direction posts, milestones or other marks used at sea or on land to guide or direct navigators or travellers, so as to render such buoys, posts or marks visible at night."—*A communication to him from abroad by Mr. F. Maxwell Lyte, of Bagnères de Bigorre, Hautes Pyrenées, in the Empire of France.*
Provisional protection only.

LAUTH.
19th April 1860.

980. BERNARD LAUTH, of the City of Manchester, in the County of Lancaster, Engineer, for an invention for—"Improvements in machinery or apparatus for straightening metal bars, rails, rods, tubes, plates and other similar articles."
Letters Patent sealed.

WHEATLEY.
MILNES.
19th April 1860.

981. SAMUEL WHEATLEY, and ALFRED MILNES, of the City of Manchester, in the County of Lancaster, for an invention for—"An improved grinding strickle for grinding the cards on the cylinders of carding-engines." *Letters Patent sealed.*

HARBEN.
HATHAWAY.
19th April 1860.

982. BENJAMIN HARBEN, of Leadenhall Street, and RICHARD ISAAC HATHAWAY, also of Leadenhall Street, aforesaid, in the City of London, for an invention for—"A substitute for ordinary butter, especially adapted for the use of pastry cooks, biscuit bakers, and general culinary purposes." *Provisional protection only.*

EDGEWORTH.
19th April 1860.

983. THOMAS FRANCIS EDGEWORTH, of 147, Park Road, Toxteth Park, Liverpool, Surgeon, for an invention for—"Improvements in apparatus for heating fluids." *Provisional protection only.*

WILLIS.
19th April 1860.

984. JAMES WILLIS, of Little Britain, in the City of London, Umbrella Furniture Maker, for an invention for—"Improvements in the manufacture of umbrellas and parasols, part of which improvements is applicable to walking-sticks."
Letters Patent sealed.

DALE.
CARO.
19th April 1860.

985. JOHN DALE, of Manchester, in the County of Lancaster, Manufacturing Chemist, and HEINRICH CARO, of the same place, Chemist, for an invention for—"Improvements in dyeing cotton yarns or threads and fabrics."—*A communication to them from abroad by August Leonhardt, of Berlin.* *Letters Patent sealed.*

MAYR.
19th April 1860.

986. JOSEF FRANZ MAYR, of Vienna, in the Empire of Austria, Merchant, for an invention for—"Improvements in the obtaining of light and in the apparatus employed therein."—*A communication to him from abroad by Johann Nepomuck Reithoffer, of Vienna, aforesaid, India-rubber Manufacturer.* *Provisional protection only.*

KINGSTON.
20th April 1860.

987. WILLIAM HOLLAND KINGSTON, A.B., Trinity College, Dublin, and of Bandon, in the County of Cork, Ireland, for an invention for—"A coke furnace for the distillation of coals."—*A communication to him from abroad by Aimè Bertholon, of St. Etienne, in the Empire of France.* *Provisional protection only.*

SEBILLE.
20th April 1860.

988. CHARLES FELIX SEBILLE, of Nantes, in the Empire of France, Manufacturer, for an invention for—"A non-metallic composition to be used in the manufacture of water, gas and other pipes or conduits, and machinery or apparatus to be used in such manufacture." *Letters Patent sealed.*

DYER.
20th April 1860.

989. JOHN DYER, Junior, of Islington, in the County of Middlesex, for an invention for—"A new or improved process for the ornamentation of certain articles of bed-room furniture." *Provisional protection only.*

ROBERTS.
20th April 1860.

990. RICHARD ROBERTS, of the City of Manchester, Civil Engineer, for an invention for—"Improvements in punching-machines." *Letters Patent sealed.*

DAWES.
20th April 1860.

991. THOMAS GEAST DAWES, of Wolverhampton, in the County of Stafford, Iron Merchant, for an invention for—"Improvements in working hammers by compressed air." *Letters Patent sealed.*

RIDINGS.
20th April 1860.

992. WILLIAM COLLINSON RIDINGS, of Middleton, in the County of Lancaster, Pattern Designer, for an invention for—"Improvements in machinery or apparatus for reading and repeating designs for perforating cards or paper for jacquard weaving." *Provisional protection only.*

BOYLE.
20th April 1860.

993. THOMAS BOYLE, of 4, Woburn Buildings, Euston Square, in the County of Middlesex, Lantern and Reflector Manufacturer, for an invention for—"Producing multiplied and many-colored reflections of light from one focus of incidence." *Provisional protection only.*

SILVER.
BARWICK.
20th April 1860.

994. HUGH ADAMS SILVER, of Silvertown, in the County of Essex, Manufacturer, and JAMES BARWICK, of the same place, Turner, for an invention for—"Improvements in moulding india-rubber and other like gums in cells for galvanic batteries and in insulators for telegraph wires." *Letters Patent sealed; no specification filed.*

LUKYN.
20th April 1860.

995. WILLIAM LUKYN (the elder), of Broad Street, and of Radford House, Ilkestone Road, in the Town and County of the Town of Nottingham, Dentist, for an invention for—"A method of attaching artificial or natural teeth on expanded or contracted frames." *Letters Patent sealed.*

DENNY.
DENNY.
20th April 1860.

996. ABRAHAM DENNY, and EDWARD MAYNARD DENNY, both of Waterford, Ireland, for an invention for—"A revolving feed apparatus as applied to singeing pigs, to facilitate the introduction of the carcasses into the singeing apparatus." *Letters Patent sealed.*

WALKER.
20th April 1860.

997. JAMES WALKER, of Walsall, in the County of Stafford, Civil Engineer, for an invention for—"Improvements in railway sleepers." *Provisional protection only.*

CLARK.
21st April 1860.

998. WILLIAM CLARK, of 53, Chancery Lane, in the County of Middlesex, Engineer and Patent Agent, for an invention for—"Improvements in enclosing or covering opium and other matters."—*A communication to him from abroad by Mr. Pierre Hector Aubergier, of Paris, in the Empire of France, Chemist.* *Provisional protection only.*

HEDLEY.
HEDLEY.
21st April 1860.

999. TOM ABERCROMBIE HEDLEY, of Banbury, Civil Engineer, and GEORGE HENRY CARNE HEDLEY, of St. Neots, Huntingdonshire, Gas Engineer, for an invention for—"Improvements in valves and apparatus for regulating the flow of fluids." *Letters Patent sealed.*

BUTLIN.
21st April 1860.

1000. WILLIAM BUTLIN, of Northampton, in the County of Northampton, for an invention for—"Improvements in apparatus for super-heating the steam and heating the feed water in steam-boilers." *Letters Patent sealed.*

MACNAB.
21st April 1860.

1001. WILLIAM MACNAB, of Greenock, in the County of Renfrew, North Britain, Engineer, for an invention for—"Improvements in and connected with marine and other steam-engines." *Letters Patent sealed.*

LEWTAS.
21st April 1860.

1002. JOSEPH LEWTAS, of Manchester, in the County of Lancaster, Manufacturer of Venetian and other Blinds, for an invention for—"An improvement applicable to outside sun blinds." *Letters Patent sealed.*

PEYTON.
BATHO.
21st April 1860.

1003. EDWARD PEYTON, and WILLIAM FOTHERGILL BATHO, of Birmingham, in the County of Warwick, Metallic Bedstead Manufacturers, for an invention for—"Improvements in the manufacture of metallic bedsteads." *Letters Patent sealed.*

BUCKWELL.
21st April 1860.

1004. WILLIAM BUCKWELL, of Phœnix Stone Works, East Greenwich, in the County of Kent, Engineer, for an invention for—"Improvements in the manufacture of slabs, plates and panels for the transmission of light." *Letters Patent sealed.*

BUCKWELL.
21st April 1860.

1005. WILLIAM BUCKWELL, of Phœnix Stone Works, East Greenwich, in the County of Kent, Engineer, for an invention for—"An improved mode of operating recording or printing telegraphic apparatus." *Letters Patent sealed.*

WALKER.
21st April 1860.

1006. JAMES WALKER, of Walsall, in the County of Stafford, Civil Engineer, for an invention for—"Improvements in railway points or switches, and also in the keys for securing the rails in the chairs of railways." *Provisional protection only.*

HARVEY.
21st April 1860.

1007. JOHN HARVEY, of Circus Street, Marylebone Road, Bath and Hot Water Apparatus Manufacturer, for an invention for—"Improvements in safety valves." *Letters Patent sealed.*

PARKINSON.
23rd April 1860.

1008. JOHN PARKINSON, of the Victoria Brass Works, Bury, in the County of Lancaster, for an invention for—"Improvements in machinery for separating small particles of iron or steel from brass and other metals or materials." *Letters Patent sealed.*

DATICHY.
23rd April 1860.

1009. FLORIMOND DATICHY, of Paris, in the Empire of France, for an invention for—"Improvements in apparatus for utilising the waste steam of steam-engines." *Provisional protection only.*

PHILIPPE.
23rd April 1860.

1010. JULES ALPHONSE PHILIPPE, Merchant, of 14, Rue du Ponceau, Paris, in the Empire of France, for an invention for—"A new process and apparatus for bleaching fabrics and substances that can be bleached such as thread, textile plants, and paper pulp." *Letters Patent sealed.*

DANGERFIELD.
23rd April 1860.

1011. JOHN DANGERFIELD, of Tipton, in the County of Stafford, Engineer, for an invention for—"Improvements in apparatus or machinery for the manufacture of chains." *Provisional protection only.*

BROOMAN.
23rd April 1860.

1012. RICHARD ARCHIBALD BROOMAN, of 166, Fleet Street, in the City of London, Patent Agent, for an invention for—"Improvements in milk cans."—*A communication to him from abroad by Louis Pierre Huard, of Paris.* *Provisional protection only.*

BROOMAN.
23rd April 1860.

1013. RICHARD ARCHIBALD BROOMAN, of 166, Fleet Street, in the City of London, Patent Agent, for an invention for—"Improvements in buoys."—*A communication to him from abroad by Francis Charles Vannet, of Paris.* *Provisional protection only.*

BIRKBECK.
23rd April 1860.

1014. GEORGE HENRY BIRKBECK, Engineer and Patent Agent, of 34, Southampton Buildings, Chancery Lane, in the County of Middlesex, for an invention for—"Improvements in machinery or apparatus for printing woven or other fabrics or tissues."—*A communication to him from abroad by Leon Malzard, Engraver, and Edouard Leopold Dulac, Printer, both of Paris, in the Empire of France.* *Letters Patent sealed.*

RITCHIE.
24th April 1860.

1015. ALEXANDER RITCHIE, of the City of Glasgow, in the County of Lanark, Accountant, residing at Number Four, Oakvale, Hillhead, near Glasgow, aforesaid, for an invention for—"Improved system of book keeping." *Letters Patent sealed.*

HOLDER.
24th April 1860.

1016. JOSEPH HOLDER, Manufacturing Chemist, of Scabes Castle, Brighton, for an invention for—"Improvements in apparatus for consuming all noxious exhalations from drying ovens used for chemical and chemical manure works and arising from such works, and from mixing decayed substances in strong acids." *Provisional protection only.*

HILLAM. WILSON. 24th April 1860.

1017. EDWARD HILLAM, of Baildon, near Leeds, in the County of York, Mechanic, and RICHARD RENNER WILSON, of Halifax, in the same County, Gentleman, for an invention for—"Improvements in apparatus employed in finishing textile fabrics." *Letters Patent sealed.*

ORIARD. 24th April 1860.

1018. LOUIS ORIARD, of Cheviré Lerouge, in the Department of Maine et Loire, in the Empire of France, Clockmaker, for an invention for—"Improvements in breech loading fire-arms and in their cartridges." *Provisional protection only.*

WILKINS. 24th April 1860.

1019. EDWARD WILKINS, of No. 8, Bath Terrace, Camberwell New Road, in the County of Surrey, Gentleman, for an invention for—"Improvements in the manufacture of boots, shoes, and goloshes." *Letters Patent sealed*

BERRI. 24th April 1860.

1020. DAVID GARDEN BERRI, of Bloomsbury, in the County of Middlesex, for an invention for—"An improved date stamp."
Complete specification; Letters Patent sealed.

BRODIE. 24th April 1860.

1021. JAMES BRODIE, of Bow of Fife, in the County of Fife, North Britain, Clerk, for an invention for—"Improvements upon latches and bolts employed in locks and other fastenings." *Provisional protection only.*

GATWOOD. 24th April 1860.

1022. EDWARD GATWOOD, of Holmer, near Hereford, in the County of Hereford, Carriage Builder, for an invention for—Improvements in fixing and securing the rails in cast iron or other chairs at joints and intermediate places in permanent ways."
Letters Patent sealed.

WRIGHTSON. 24th April 1860.

1023. FRANCIS WRIGHTSON, of Birmingham, in the County of Warwick, Professor of Chemistry in Sydenham College, Birmingham, for an invention for——"Improvements in applying certain waste or refuse products to the purification of coal gas, and in utilizing compounds obtained in purifying coal gas."
Provisional protection only.

STAFFORD. STAFFORD. 24th April 1860.

1024. JOHN STAFFORD, of Oakerthorpe, in the County of Derby, Manager, and BENJAMIN STAFFORD, of New Lenton, in the County of Nottingham, Machine Builder, for an invention for—"An improved method of applying heated air or steam for drying stoves or boiling liquids or for other purposes." *Letters Patent sealed.*

ALBRECHT. 24th April 1860.

1025. CHARLES EDMUND ALBRECHT, of Radnor Place, Hyde Park, in the County of Middlesex, Gentleman, for an invention for—"An improved apparatus for sifting or screening." *Letters Patent sealed.*

FULLER. 24th April 1860.

1026. JOHN WALLACE FULLER, of Her Majesty's Dock-yard, Deptford, in the County of Kent, Timber Converter, for an invention for—"An improved method of fitting dead-eye-chain and preventer plates to ships." *Provisional protection only.*

CLARK. 24th April 1860.

1027. WILLIAM CLARK, of 53, Chancery Lane, in the County of Middlesex, Engineer and Patent Agent, for an invention for—"Improvements in the manufacture of ammonia."—*A communication to him from abroad by Messrs. Louis Joseph Frédéric Margueritte, Chemist, and Alfred Lalouël de Sourdeval, both of Paris, in the Empire of France.* *Letters Patent sealed.*

FORD. 24th April 1860.

1028. JOHN WILLIAM FORD, of Change Alley, Cornhill, in the City of London, Ship Broker, for an invention for—"Improvements in the driving gear of pumps."—*A communication to him from abroad by Charles W. Clements, of Yarmouth, Nova Scotia.* *Letters Patent sealed.*

MORGAN. 24th April 1860.

1029. HENRY JOHN MORGAN, of 48, Gloster Terrace, Hyde Park, in the County of Middlesex, for an invention for—"Improvements in rockets."
Provisional protection only.

NEWTON. 24th April 1860.

1030. ALFRED VINCENT NEWTON, of the Office for Patents, 66, Chancery Lane, in the County of Middlesex, Mechanical Draughtsman, for an invention for—"An improved construction of ships' stove."—*A communication to him from abroad by George Alexander New, of New York.* *Provisional protection only.*

ATKINSON. 24th April 1860.

1031. ROBERT ATKINSON, of [the firm of R. Atkinson & Co., of Southampton Court, Tottenham Court Road, in the County of Middlesex, for an invention for—"An apparatus to give warning to the inmates of a house or apartment of the attempted entry of thieves or burglars, which may be called a burglar and thief detector." *Provisional protection only.*

KENNEDY. 25th April 1860.

1032. JAMES KENNEDY, of Church Street, Millbank Street, Westminster, in the County of Middlesex, for an invention for—"Improvements in the construction of sliding sash frames or windows." *Provisional protection only.*

CLAEYS. 25th April 1860.

1033. THEODOOR AUGUSTIN CLAEYS, of Ostend, in the Kingdom of Belgium, Civil Engineer, for an invention for—"Improved machinery for the manufacture of corks, bungs, and shives." *Letters Patent sealed.*

LARDIN. 25th April 1860.

1034. VICTOR LARDIN, of Montigny-le-Roi, in the Department of the Haute Marne, in the Empire of France, Mechanician, for an invention for—Improvements in water pumps." *Provisional protection only.*

MINASI. 25th April 1860.

1035. CARLO MINASI, of 3, Saint James' Terrace, Kentish Town Road, in the County of Middlesex, Professor of Music, for an invention for—"Improvements in music stools and other seats, and in stands for supporting music books and other articles." *Letters Patent sealed.*

EATON. 25th April 1860.

1036. ASAHEL KNOWLTON EATON, of the City of New York, in the State of New York, one of the United States of America, for an invention for—"A mode of manufacturing steel." *Letters Patent sealed.*

PARKER. 25th April 1860.

1037. GEORGE JUBILEE PARKER, of Church Street, Stoke Newington, in the County of Middlesex, Carpenter, for an invention for—"Improvements in the means or apparatus for raising water and other fluids." *Letters Patent sealed.*

MASON. 25th April 1860.

1038. JAMES MASON, the younger, of Preston, in the County Palatine of Lancaster, Mechanic, for an invention for—"Improvements in looms for weaving." *Letters Patent sealed.*

NICHOLLS. LEONARD. 25th April 1860.

1039. SILAS NICHOLLS, of No. 7, Buckland Street, New North Road, Hoxton, Builder, and HENRY LEONARD, of 45, Arlington Street, Islington, Engraver, for an invention for—"An improved fire guard or protector." *Provisional protection only.*

TARTE. TOOVEY. 25th April 1860.

1040. XAVIER TARTE, of No. 20, Rue de l'Union, Brussels, in the Kingdom of Belgium, Civil Engineer, and WILLIAM TOOVEY, of No. 3, Rue de la Pompe, Brussels, aforesaid, Lithographer, for an invention for—"Improvements in the construction of floorings and roofings and other parts of buildings and other structures, which improvements are also applicable to the construction of bridges and other works." *Letters Patent sealed.*

SEAGER. 25th April 1860.

1041. ROBERT SEAGER, of Ipswich, for an invention for—"Improvements in the manufacture of boots and shoes." *Letters Patent sealed.*

WEST. 25th April 1860.

1042. JOHN GEORGE WEST, of Fleet Street, in the City of London, Ships' Compass Maker, for an invention for—"An improvement in compasses." *Letters Patent sealed.*

HARTMANN. 25th April 1860.

1043. JULES ALBERT HARTMANN, of Mulhouse, in the Empire of France, Chemist, for an invention for—"The extraction of a certain coloring matter from rags and other waste vegetable textile fabrics containing the same." *Provisional protection only.*

DURAND. 26th April 1860.

1044. JEAN CLAUDE DURAND, of Brydges Street, Covent Garden, in the County of Middlesex, Civil Engineer, for an invention for—"A new system of drainage for towns when affected by the tide." *Provisional protection only.*

CLARK. CROSS. 26th April 1860.

1045. JOHN CLARK, Manufacturer, and WILLIAM CROSS, Manager, both of Glasgow, in the County of Lanark, North Britain, for an invention for—"Improvements in power looms for weaving checks." *Letters Patent sealed.*

ROBERTSON. 26th April 1860.

1046. ANDREW ROBERTSON, of Neilston, in the County of Renfrew, North Britain, Bleacher, for an invention for—"Improvements in steam-boiler furnaces." *Provisional protection only.*

FERNIE. 26th April 1860.

1047. EBENEZER WAUGH FERNIE, of 11, Old Jewry Chambers, in the City of London, for an invention for—"Improvements in open fire-places and in their flues." *Provisional protection only.*

BATE. 26th April 1860.

1048. WILLIAM BATE, of Wolverhampton, for an invention for—"Improvements in attaching knobs to spindles of door locks and latches." *Letters Patent sealed.*

WRIGHT. 26th April 1860.

1049. JAMES WRIGHT, of 42, Bridge Street, Blackfriars, City of London, Civil Engineer, for an invention for—"A new mode of preventing incrustation in boilers using sea or calcareous waters."—*A communication to him from abroad by Horace Gray, of Boston, Massachusetts, United States of America. Provisional protection only.*

MALTBY. 26th April 1860.

1050. WILLIAM MALTBY, of De Crespigny Park, Camberwell, County of Surrey, Gentleman, for an invention for—" Improvements in the treatment of rice in order to manufacture starch, starch-gum, and gums." *Provisional protection only.*

TRAIN. 26th April 1860.

1051. GEORGE FRANCIS TRAIN, of Liverpool, in the County of Lancaster, Merchant, for an invention for—" Improved system of railway or tramway to be used with horses or other power, and passenger carriages for the same." *Letters Patent sealed.*

BUCKWELL. 26th April 1860.

1052. WILLIAM BUCKWELL, of Phœnix Stone Works, East Greenwich, in the County of Kent, Engineer, for an invention for—" Improvements in the construction of iron roofs and bridges, and in apparatus to be used in their erection." *Letters Patent sealed; no specification filed.*

JOHNSON. 26th April 1860.

1053. JOHN HENRY JOHNSON, of 47, Lincoln's Inn Fields, in the County of Middlesex, and of 166, Buchanan Street, in the City of Glasgow, North Britain, Gentleman, for an invention for—" Improvements in portable bedsteads and in the mattresses to be used therewith."—*A communication to him from abroad by Eugene Etienne Barbier St. Ange, of Paris, in the Empire of France, Merchant.* *Letters Patent sealed.*

BROOMAN. 26th April 1860.

1054. RICHARD ARCHIBALD BROOMAN, of 166, Fleet Street, in the City of London, Patent Agent, for an invention for—" Improvements in lamps."—*A communication to him from abroad by Jean Jules Morel, and Louis Augustin Guillemont, of Paris.* *Provisional protection only.*

CLARK. 26th April 1860.

1055. WILLIAM CLARK, of 53, Chancery Lane, in the County of Middlesex, Engineer and Patent Agent, for an invention for—" Improvements in boring bits."—*A communication to him from abroad by Messrs. Gabriel Coulouvrat, and Auguste Genon, of Paris, in the Empire of France.* *Provisional protection only.*

HARVEY. 26th April 1860.

1056. WILLIAM JAMES HARVEY, of Exeter, Gun Manufacturer, for an invention for—" Improvements in the manufacture of breech loading fire-arms, also in cartridges applicable for the same." *Letters Patent sealed.*

NORTHEN. 27th April 1860.

1057. WILLIAM NORTHEN, of 14, Vauxhall Walk, Lambeth, in the County of Surrey, Potter, for an invention for—" An improvement in the internal construction of kilns used for the burning of stoneware or earthenware of every description." *Letters Patent sealed.*

WHITE. WHITE. WHITE. 27th April 1860.

1058. JAMES WHITE, of Hulme, in the City of Manchester, GEORGE WHITE, of the same place, and JOHN WHITE, also of the same place, Millwrights and Engineers, for an invention for—" An improvement or improvements in machinery for pressing and cutting tobacco or other substances." *Letters Patent sealed.*

D'AUBRÉVILLE. 27th April 1860.

1059. LÉOPOLD D'AUBRÉVILLE, of No. 60, Boulevart de Strasbourg, Paris, Civil Engineer, for an invention for—" Improvements in the manufacture of metallic boxes or vessels used to contain preserved alimentary provisions or other substances, and in the apparatuses and machinery employed therein."—*A communication to him from Alfred Henry Rémond, a person resident at No. 1, Place Vintimille, Paris.* *Letters Patent sealed.*

TAYLOR. 27th April 1860.

1060. WILLIAM BOWERS TAYLOR, of Ballymena, in the County of Antrim, in Ireland, for an invention for—" Certain improvements in looms for weaving." *Provisional protection only.*

THORN. 27th April 1860.

1061. PETER THORN, of 70, Cumberland Street, Pimlico, in the County of Middlesex, Gentleman, for an invention for—" Improvements in signals applicable to domestic and other purposes." *Letters Patent sealed.*

AGER. 27th April 1860.

1062. GEORGE AGER, of Aylsham, in the County of Norfolk, L.L.D., for an invention for—" Improvements in means or apparatus for breaking up or opening land." *Letters Patent sealed.*

NICHOLS. 27th April 1860.

1063. JOHN NICHOLS, of Pendleton, in the County of Lancaster, Manager, for an invention for—" Improvements in looms for weaving." *Letters Patent sealed.*

BULLOUGH. 27th April 1860.

1064. JAMES BULLOUGH, of New Accrington, in the County of Lancaster, Manufacturer, for an invention for—" Improvements in looms for weaving." *Letters Patent sealed.*

THONET. 27th April 1860.

1065. FRANZ THONET, of the firm of Thonet, Brothers, of Vienna, in the Empire of Austria, Manufacturers, for an invention for—"Improvements in the construction of wooden wheels." *Letters Patent sealed; specification filed by order*

LORKIN. 27th April 1860.

1066. JOSIAH LORKIN, of Brighton, in the County of Sussex, Gentleman, for an invention for—"An improvement in the manufacture of gunpowder."—*A communication to him from abroad by Volney Maxwell, of Wilkes Barre, in the United States of America.* *Provisional protection only.*

ROSSER. 27th April 1860.

1067. HENRY SHEPHERD ROSSER, of Kensington, in the County of Middlesex, Gentleman, for an invention for—"An improved sole to be worn in boots and shoes." *Letters Patent sealed.*

NEWTON. 27th April 1860.

1068. WILLIAM EDWARD NEWTON, of the Office for Patents, 66, Chancery Lane, in the County of Middlesex, Civil Engineer, for an invention for—"Improvements in ordnance and fire-arms."—*A communication to him from abroad by Charles Frederick Brown, of Warren, State of Rhode Island, in the United States of America.* *Letters Patent sealed.*

FLOIRE. 27th April 1860.

1069. LOUIS ALEXANDRE FLOIRE, of 29, Boulevart St. Martin, Paris, Professor of Mathematics, for an invention for—"An improved electric break." *Provisional protection only.*

SIBLEY. 27th April 1860.

1070. THOMAS SIBLEY, of Ashton-under-Lyne, in the County of Lancaster, Machine Maker, for an invention for—"Improvements in looms for weaving." *Provisional protection only.*

WITHERS. 27th April 1860.

1071. GEORGE WITHERS, Patent Lock and Wrought Iron Safe Manufacturer, of West Bromwich, in the County of Stafford, for an invention for—"Certain improvements in fire-proof wrought iron safes, chests or closets, in locks for the same and other purposes, and for certain apparatus to be used in connection with the same." *Provisional protection only.*

SCARBOROUGH. McMILLAN. 27th April 1860.

1072. JOHN VICKERS SCARBOROUGH, of Belfast, in the County of Antrim, Ireland, Boot and Shoe Manufacturer, and DANIEL McMILLAN, of the same place, Clog Maker, for an invention for—"Improvements in the manufacture of boots, shoes, and clogs." *Provisional protection only.*

LOW. 27th April 1860.

1073. WILLIAM LOW, of Edinburgh, in the County of Mid Lothian, North Britain, Engineer, for an invention for—"Improvements in machinery or apparatus for rubbing or finishing printing types." *Provisional protection only.*

SIDEBOTTOM. 28th April 1860.

1074. JOHN SIDEBOTTOM, of Broadbottom, near Mottram, in the County of Chester, Cotton Spinner and Manufacturer, for an invention for—"Certain improvements in looms for weaving." *Provisional protection only.*

MOLINEAUX. 28th April 1860.

1075. THOMAS MOLINEAUX, of the City of Manchester, in the County of Lancaster, Piano-forte and Music Seller, for an invention for—"Improvements in piano-fortés." *Letters Patent sealed.*

GREEN. 28th April 1860.

1076. JOSEPH GREEN, of Leeds, in the County of York, Machine Maker, for an invention for—"An improved cutting and sawing machine." *Letters Patent sealed.*

DOWIE. 28th April 1860.

1077. ANDREW LINMERE DOWIE, of Glasgow, in the County of Lanark, North Britain, Merchant, for an invention for—"Improvements in gas burners, and in pressure regulating apparatus for the same." *Provisional protection only.*

BERWICK. 28th April 1860.

1078. The Right Honorable RICHARD Lord BERWICK, of Attingham Hall, in the County of Salop, for an invention for—"Improvements in rifling fire-arms." *Letters Patent sealed.*

SAMSON. 28th April 1860.

1079. WILLIAM HENRY SAMSON, of Le Vol Farm, St. Brelade's Bay, in the Island of Jersey, Channel Islands, for an invention for—"A machine or apparatus for the cultivation of the soil." *Letters Patent sealed.*

BARR. 28th April 1860.

1080. HENRY JAMES BARR, of Bombay, Lieutenant Colonel in Her Majesty's Indian Army, for an invention for—"Improvements in working railway signals and in apparatus employed therein." *Provisional protection only.*

SOUTHORN. 28th April 1860.

1081. EDWIN SOUTHORN, of Broseley, in the County of Salop, Manufacturer, for an invention for—"An improvement in or addition to tobacco pipes, and improvements in the manutacture and ornamentation of tobacco pipes." *Letters Patent sealed.*

GRANTHAM. 28th April 1860.

1082. JOHN GRANTHAM, of 31, Nicholas Lane, in the City of London, for an invention for—"Improvements in apparatus for feeding furnaces with coals." *Provisional protection only.*

RAWSON. 28th April 1860.

1083. HENRY RAWSON, of Leicester, Manufacturer, for an invention for—"Improvements in machinery for combing wool and other fibres." *Letters Patent sealed.*

GRANTHAM. 28th April 1860.

1084. JOHN GRANTHAM, of 31, Nicholas Lane, in the City of London, for an invention for—"Improvements in slips for raising ships and vessels." *Letters Patent sealed.*

MASURE. 30th April 1860.

1085. GEORGES MASURE, of Brussels, in the Kingdom of Belgium, Banker's Clerk, for an invention for—"Improvements in the construction of railway crossings." *Letters Patent sealed.*

GOSSAGE. 30th April 1860.

1086. WILLIAM GOSSAGE, of Widnes, in the County of Lancaster, Chemist, for an invention for—"Improvements in obtaining products by means of distillation and condensation or by one of such means from oily, fatty, resinous, and bituminous substances." *Provisional protection only.*

GILLARD. 30th April 1860.

1087. JOSEPH PIERRE GILLARD, of Alfred Road, St. John's Ville, Upper Holloway, in the County of Middlesex, Civil Engineer, for an invention for—"Improvements in apparatus for manufacturing gas for lighting and heating and for obtaining motive-power." *Provisional protection only.*

BOUSFIELD. 30th April 1860.

1088. GEORGE TOMLINSON BOUSFIELD, of Loughborough Park, Brixton, in the County of Surrey, for an invention for—"Improvements in apparatus for working the valves of steam-engines."—*A communication to him from abroad by Edward N. Dickerson, of Park Row, New York, United States of America.* *Letters Patent sealed.*

GREEN. WRIGHT. 30th April 1860.

1089. HENRY THOMAS GREEN, of Moreton, in the Parish of Gnosall, in the County of Stafford, Gentlemen, and SAMUEL BARLOW WRIGHT, of Parkfields, in the Parish of Barlaston, in the said County of Stafford, Gentlemen, for an invention for—"Improvements in machinery for the manufacture of plain and ornamented bricks, slabs, tiles, and quarries." *Letters Patent sealed.*

HUTCHINSON. 30th April 1860.

1090. HIRAM HUTCHINSON, of No. 102, Rue Richelieu, in the City of Paris, in the Empire of France, Merchant, for an invention for—"Improvements in the manufacture of goods coated with india-rubber and other gums, and in apparatus to be employed therein."—*A communication to him by Mr. Lorin Burt, residing at Langlèe, in the Department of the Loiret, France, Mechanician.* *Letters Patent sealed.*

HUGHES. 30th April 1860.

1091. EDWARD THOMAS HUGHES, of the firm of Hughes and Son, Patent Agents, 123, Chancery Lane, London, for an invention for—"Improvements in jointing or connecting rails of railways."—*A communication to him from abroad by Pierre Irénée Leys, of Amsterdam, Holland.* *Letters Patent sealed.*

LANSLEY. 30th April 1860.

1092. JOHN LANSLEY, of Brown Candover, in the County of Hants, Smith, for an invention for—"Improvements in harrows." *Provisional protection only.*

BENNETT. 30th April 1860.

1093. JAMES HENRY BENNETT, Engineer, resident at 7, Vanburgh Place, Leith, in the County of Edinburgh, for an invention for—"Combined direct action balance safety valves." *Letters Patent sealed.*

UPWARD. 1st May 1860.

1094. ALFRED UPWARD, of the Gas Works, Brick Lane, St. Luke's, in the County of Middlesex, for an invention for—"Improvements in apparatus employed in boring and tapping gas and water mains, and in fitting service pipes thereto." *Letters Patent sealed.*

PRESTON. 1st May 1860.

1095. FRANCIS PRESTON, of the City of Manchester, Engineer, for an invention for—"Certain improvements in breech loading fire-arms and in projectiles, also in the machinery employed in manufacturing projectiles." *Letters Patent sealed.*

TAYLOR. 1st May 1860.

1096. JAMES TAYLOR, of Artillery Lane, Bishopsgate Street Without, in the County of Middlesex, for an invention for—"Improved apparatus for preventing a downward draught of air in chimneys, and for causing the smoke to ascend, applicable also for the purposes of ventilation." *Provisional protection only.*

WALSH. 1st May 1860.

1097. JOHN HENRY WALSH, of Kensington, in the County of Middlesex, for an invention for—"An improvement in breech-loading fire-arms and in rests to be employed therewith, which rests are also applicable to other descriptions of fire-arms." *Provisional protection only.*

BOWER. 1st May 1860.	1098. GEORGE BOWER, of Droylesden, in the County of Lancaster, Iron Moulder, for an invention for—"Certain improvements in metallic pistons." *Letters Patent sealed.*
HENDERSON. 1st May 1860.	1099. WILLIAM HENDERSON, of Glasgow, in the County of Lanark, North Britain, Soap Manufacturer, for an invention for—"Improvements in the manufacture or production of nitrate of potash and soda, and in the application and use of certain products of such manufacture in the manufacture of soap." *Letters Patent sealed.*
NEWTON. 1st May 1860.	1100. ALFRED VINCENT NEWTON, of the Office for Patents, 66, Chancery Lane, in the County of Middlesex, Mechanical Draughtsman, for an invention for—"Improved apparatus for lifting vessels out of water."—*A communication to him from abroad by Horace Irving Crandull, of New Bedford, Bristol County, State of Massachusetts, United States of America.* *Letters Patent sealed.*
BAIN. 2nd May 1860.	1101. ALEXANDER BAIN, of Rahere Street, Goswell Road, in the County of Middlesex, Engineer, for an invention for—"Improvements in the means of obtaining copies of letters and other writings or documents." *Letters Patent sealed.*
BROWN. 2nd May 1860.	1102. JOHN BROWN, of the City of Manchester, in the County of Lancaster, Agent, for an invention for—"Improvements in the spouts or tubes of lubricating cans." *Provisional protection only.*
GEDGE. 2nd May 1860.	1103. WILLIAM EDWARD GEDGE, of the firm of John Gedge and Son, of No. 11, Wellington Street, Strand, in the County of Middlesex, Patent Agent, for an invention for—"Improvements in the manufacture of bolts."—*A communication to him from abroad by Alexandre Joseph and Jean Rémy Maré, of Bogny-sur-Meuse, Ardennes, France.* *Provisional protection only.*
GEDGE. 2nd May 1860.	1104. WILLIAM EDWARD GEDGE, of the firm of John Gedge and Son, No. 11, Wellington Street, Strand, in the County of Middlesex, Patent Agent, for an invention for—"An improved apparatus for obtaining pneumatic power."—*A communication to him from abroad by Jean Baptiste Tisserant, of St. Michel, Meuse, France, Professor.* *Provisional protection only.*
BROWNE. 2nd May 1860.	1105. BENJAMIN BROWNE, of No. 52, King William Street, in the City of London, Civil Engineer and Patent Agent, for an invention for—"A self-heating ironing apparatus."—*A communication to him from abroad by Charles Jean Eugene Baptiste Cailloüé, of Paris, Barrister.* *Provisional protection only.*
JACKSON. 2nd May 1860.	1106. WILLIAM STERLING JACKSON, of Milton Street, Dorset Square, in the County of Middlesex, for an invention for—"Improvements in the manufacture of soap." *Provisional protection only.*
BONNOR. 2nd May 1860.	1107. MATHIEU BONNOR, of Eurville, Town in the French Empire, Manufacturer, for an invention for—"Improvements in machinery for rolling bar iron, steel and other metals or malleable matters." *Letters Patent sealed.*
GARDNER. 2nd May 1860.	1108. JAMES GARDNER, of Eversholt Street, in the County of Middlesex, Carver and Gilder, for an invention for—"Improvements in metallic bedsteads." *Letters Patent sealed.*
SILVER. 2nd May 1860.	1109. THOMAS SILVER, of Philadelphia, in the State of Pensylvania, in the United States of North America, Gentleman, for an invention for—"Improvements in the machinery for and method of driving or communicating motion to a ship's propeller." *Letters Patent sealed; no specification filed.*
DIXON. 3rd May 1860.	1110. ADAM DIXON, of Birmingham, in the County of Warwick, Engineer, for an invention for—"Improvements in screw stocks and dies." *Provisional protection only.*
BRICKHILL. NOBLE. 3rd May 1860.	1111. JAMES BRICKHILL, of Saint Leonard's Road, Bromley, and JAMES NOBLE, of York Street East, Stepney, both in the County of Middlesex, Engineers, for an invention for—"Improvements in screw propellers." *Letters Patent sealed.*
NORMANDY. 3rd May 1860.	1112. ALPHONSE RENÉ LE MIRE NORMANDY, of Odin Lodge, King's Road, Clapham Park, for an invention for—"Improvements in the construction of steam-boilers." *Provisional protection only.*
TOOMER. 3rd May 1860.	1113. GEORGE ELGAR TOOMER, of Hoaden House, Ash, Sandwich, in the County of Kent, Farmer, for an invention for—"An improved construction of plough." *Provisional protection only.*

HENRY. 3rd May 1860.

1114. MICHAEL HENRY, of 84, Fleet Street, in the City of London, Patent Agent, for an invention for—"Improvements in the mode of and apparatus for propelling, turning and changing the direction of ships, balloons and other bodies."—*A communication to him from abroad by Louis Coignard, of 33, Boulevard Saint Martin, Paris, Artist.* *Letters Patent sealed.*

DAVIES. 3rd May 1860.

1115. GEORGE DAVIES, of No. 1, Serle Street, Lincoln's Inn, in the County of Middlesex, and No. 28, St. Enoch Square, in the City of Glasgow, Civil Engineer and Patent Agent, for an invention for—"Improvements in the manufacture of boots, shoes and other coverings for the feet, and in apparatus connected with such manufacture."—*A communication to him from abroad by Alexandre Joseph Duchatel, of Paris, France.* *Letters Patent sealed.*

REID. 4th May 1860.

1116. HENRY REID, of Lee, in the County of Kent, for an invention for—"Improvements in hoops for hooping casks, barrels and such like articles." *Letters Patent sealed.*

LACOMME. 4th May 1860.

1117. AUGUSTE LACOMME, 2, Carlisle Street, Soho Square, for an invention for—"An apparatus,—The pneumato-liquid mover,—applicable to all branches of industry which require a first prime mover." *Provisional protection NOT granted.*

RAILTON. 4th May 1860.

1118. TIMOTHY RAILTON, of the City of Manchester, Manufacturer, for an invention for—"Improvements in the apparatus employed in the manufacture of cap or bonnet fronts." *Letters Patent sealed.*

HEATLEY, PADDOCK. 4th May 1860.

1119. THOMAS HEATLEY, of High Hatton, Shawbury, Agriculturist, and WILLIAM PADDOCK, of Shrewsbury, both in the County of Salop, Agricultural Machinist, for an invention for—"Improvements in threshing-machines." *Letters Patent sealed.*

STEVENS. 5th May 1860.

1120. CHARLES STEVENS, Manager of the British and Foreign Office for Patents, 18, Welbeck Street, Cavendish Square, in the County of Middlesex, for an invention for—"An improved means and apparatus for transporting and preserving live fish and keeping water fresh for a long period."—*A communication to him from abroad by Jean Cyrille Noël, of Paris, in the Empire of France.* *Provisional protection only.*

WEST. 5th May 1860.

1121. DANIEL WEST, of Egremont Place, No. 2, Euston Road, in the County of Middlesex, Civil Engineer, Esquire, for an invention for—"An improvement for working the geometrical cotton press with steam power." *Complete specification; Letters Patent sealed.*

HARDON. LEE. 5th May 1860.

1122. EDWIN HARDON, of Stockport, in the County of Chester, Manufacturer, and LEE LEE, of the City of Manchester, Merchant, for an invention for—"Certain improvements in finishing woven fabrics." *Letters Patent sealed.*

SMITH. 5th May 1860.

1123. ELLISON SMITH, of Keighley, in the County of York, Mechanic, for an invention for—"An improvement in machinery for preparing wool, cotton, flax and other fibrous materials." *Provisional protection only.*

GRIMOND. 5th May 1860.

1124. JOSEPH GRIMOND, of Dundee, in the County of Forfar, North Britain, Manufacturer, for an invention for—"Improvements in weaving." *Letters Patent sealed.*

DENLEY. PERRIN. 5th May 1860.

1125. WILLIAM DENLEY, of Exeter Place, Hans Place, Chelsea, Bricklayer, and JOHN PERRIN, of Walton Street, Chelsea, Builder, both in the County of Middlesex, for an invention for—"Improvements in fire-places and flues." *Provisional protection only.*

HUNT. 5th May 1860.

1126. WILLIAM HUNT, of Tipton, in the County of Stafford, Manufacturing Chemist, for an invention for—"Improvements in the manufacture of carbonate of soda, and in apparatus to be employed in the said manufacture, also in utilizing waste products obtained in the said manufacture." *Letters Patent sealed.*

TWEEDALE. TWEEDALE. TAYLOR. 5th May 1860.

1127. ABRAHAM TWEEDALE, & JOHN TWEEDALE, of Healey Hall, near Rochdale, in the County of Lancaster, Manufacturers, and SAMUEL TAYLOR, of Rochdale, aforesaid, Clock Maker, for an invention for—"Improvements in temples for looms and in indicating the number of picks made in such machinery for a given length of cloth." *Letters Patent sealed; no specification filed.*

DOUGALL. 7th May 1860.

1128. JAMES DALZIEL DOUGALL, of Glasgow, in the County of Lanark, North Britain, Gunsmith, for an invention for—"Improvements in breech-loading fire-arms." *Letters Patent sealed.*

NEWTON. 7th May 1860.

1129. WILLIAM EDWARD NEWTON, of the Office for Patents, 66, Chancery Lane, in the County of Middlesex, Civil Engineer, for an invention for—"Improvements in the manufacture of glass."—*A communication to him from abroad by Richard H. Manning, of the City of New York.* *Letters Patent sealed.*

NEWTON. 7th May 1860.

1130. WILLIAM EDWARD NEWTON, of the Office for Patents, 66, Chancery Lane, in the County of Middlesex, Civil Engineer, for an invention for—"An improvement in rotary planes."—*A communication to him from abroad by John Sperry, of the City of New York.* *Letters Patent sealed.*

ROBERTS. 7th May 1860.

1131. MARTYN JOHN ROBERTS, of Crickhowell, in the County of Brecon, Esquire, for an invention for—"Improvements in breech loading fire-arms." *Provisional protection only.*

EISENETUCK. 7th May 1860.

1132. JACOB ALBERT EISENSTUCK, of Chemnitz, in the Kingdom of Saxony, Hosiery Manufacturer, for an invention for—"Improvements in knitting-machinery." *Letters Patent sealed.*

HARRIS. 7th May 1860.

1133. JOSIAH HARRIS, Mining Engineer, of City Bank Chambers, Threadneedle Street, London, for an invention for—"Improvements in the manufacture of coke and charcoal from lignite and obtaining products therefrom." *Provisional protection only.*

JOHNSON. 7th May 1860.

1134. JOHN HENRY JOHNSON, of 47, Lincoln's Inn Fields, in the County of Middlesex, and of 166, Buchanan Street, in the City of Glasgow, North Britain, Gentleman, for an invention for—"Improvements in pipe couplings."—*A communication to him from abroad by Messrs. Button and Blake, of Washington, in the United States of America, Fire Engine Manufacturers.* *Letters Patent sealed.*

CORBETT. 8th May 1860.

1135. JOHN CORBETT, of Stoke Works, near Bromsgrove, in the County of Worcester, Salt Manufacturer, for an invention for—"Improvements in evaporating pans for the manufacture of salt." *Letters Patent sealed.*

McDONALD. 8th May 1860.

1136. WILLIAM McDONALD, of the Hyde Park Barracks, Knightsbridge, in the County of Middlesex, a Corporal in Her Majesty's 2nd Life Guards, for an invention for—"Improvements in military saddles and in stirrup-irons to be used therewith." *Letters Patent sealed.*

BARKER. SCHWEITZER. 8th May 1860.

1137. WILLIAM ROBERT BARKER, and JULIUS SCHWEITZER, of No. 29, Chapel Street, Belgrave Square, in the County of Middlesex, Chemists, for an invention for—"Improvements in the manufacture of artificial mineral chalybeate water." *Provisional protection only.*

EVANS. 8th May 1860.

1138. WALTER EVANS, of Derby, in the County of Derby, for an invention for—"Improvements in machinery for polishing yarns and threads." *Letters Patent sealed.*

SUTTON. 8th May 1860.

1139. DANIEL SUTTON, of Broad Street, Banbury, Oxon, for an invention for—"Improvements in the construction of rollers for rolling and crushing land." *Provisional protection only.*

GLADSTONE. 8th May 1860.

1140. THOMAS MURRAY GLADSTONE, Engineer, of London Street, City, E.C., in the County of Middlesex, for an invention for—"An improvement in the construction and form of anchors." *Provisional protection only.*

SCOTT. 9th May 1860.

1141. GEORGE SCOTT, Engineer, of 15, Ashburnham Terrace, Greenwich, in the County of Kent, for an invention for—"Improvements in furnace or grate bars." *Provisional protection only.*

KEMP. 9th May 1860.

1142. HENRY KEMP, of the Parish of Saint Marylebone, in the County of Middlesex, Gentleman, for an invention for—"Improvements in preserving wood, leather, iron and other substances." *Letters Patent sealed.*

GEOGHEGAN. 9th May 1860.

1143. ROBERT GEOGHEGAN, of James Street Brewery, in the City of Dublin, for an invention for—"Improvements in machinery or apparatus for expressing liquids from various substances." *Provisional protection only.*

BUTTERWORTH. 9th May 1860.

1144. ELLIS BUTTERWORTH, of Calder Cottage, Spotland, near Rochdale, in the County of Lancaster, Engineer, for an invention for—"Improvements in machinery for preparing and spinning cotton and other fibrous substances." *Letters Patent sealed.*

DE BUYER. 9th May 1860.

1145. JEAN BAPTISTE JOSEPH DE BUYER, of Rupt, near Scey-sur-Saone, of the Department of the Haute Saone, in the Empire of France, for an invention for—"A new system of cast iron cart wheels." *Letters Patent sealed.*

REID. 9th May 1860.

1146. JAMES REID, of 25, University Street, in the County of Middlesex, Telegraph Engineer, for an invention for—"Improvements in electric telegraph conductors." *Letters Patent sealed.*

SHAVER. 9th May 1860.

1147. ARCHIBALD G. SHAVER, of New Haven, in the County of New Haven, and State of Connecticut, U. S. A., for an invention for—"An eraser and pencil sharpener." *Provisional protection only.*

FISHER. 9th May 1860.

1148. JOHN MARTYN FISHER, of Taunton, in the County of Somerset, Manufacturing and Furnishing Ironmonger, for an invention for—"Improvements in chimney tops or cowls." *Letters Patent sealed.*

BROOMAN. 9th May 1860.

1149. RICHARD ARCHIBALD BROOMAN, of 166, Fleet Street, in the City of London, Patent Agent, for an invention for—"Improvements in horse mills."—*A communication to him from abroad by William Wells-Grollier, of Poitiers, France.* *Provisional protection only.*

NEWTON. 9th May 1860.

1150. WILLIAM EDWARD NEWTON, of the Office for Patents, 66, Chancery Lane, in the County of Middlesex, Civil Engineer, for an invention for—"Improvements in the manufacture of threads and yarns, and in the preparation of fibrous materials for such manufacture."—*A communication to him from abroad by George R. Sampson, of Boston, Massachusetts, in the United States of America.* *Letters Patent sealed.*

JOHNSON. 9th May 1860.

1151. WILLIAM BECKETT JOHNSON, Manager for Messrs. Richard Ormerod and Son, of Manchester, in the County of Lancaster, Engineers, for an invention for—"Improvements in steam-engines and boilers and apparatus connected therewith." *Letters Patent sealed.*

HOWARD. LILLEY. 9th May 1860.

1152. JAMES HOWARD, of Bedford, Agricultural Implement Maker, and JOHN LILLEY, of Astwood, in the County of Buckingham, Farmer, for an invention for—"An improved construction of horse hoe." *Letters Patent sealed.*

GEDGE. 10th May 1860.

1153. WILLIAM EDWARD GEDGE, of the firm of John Gedge and Son, No. 11, Wellington Street, Strand, in the County of Middlesex, Patent Agent, for an invention for—"Improvements in breech loading fire-arms."—*A communication to him from abroad by Joseph Humbertjean, and Charles Matthey, of Bésançon, in the Empire of France.* *Provisional protection only.*

WILDSMITH. CARTER. CARTER. 10th May 1860.

1154. HENRY WILDSMITH, JOSHUA CARTER, and JAMES JOSHUA CARTER, of Batley, in the County of York, Wool Extractors, for an invention for—"Improvements in extracting wool or other animal fibres from combinations of wool and cotton or mixtures of other animal and vegetable fibrous substances or fabrics, and in the machinery or apparatus employed therein." *Letters Patent sealed.*

BOYMAN. 10th May 1860.

1155. RICHARD BOYMAN BOYMAN, of Park Crescent, Stockwell, in the County of Surrey, Esquire, for an invention for—"Improvements in applying steam or other expansive prime movers by action and reaction for rotary motion and propulsion, and in the machinery for the purpose." *Letters Patent sealed.*

EDWARDS. 10th May 1860.

1156. FREDERICK EDWARDS, of the firm of Frederick Edwards, Son and Company, of Great Marlborough Street, in the County of Middlesex, Stove Grate Manufacturers, for an invention for—"Improvements in chimney bars or plates." *Provisional protection only.*

WILSON. 10th May 1860.

1157. ALEXANDER WILSON, of the City and County of Edinburgh, for an invention for—"Improvements in the construction of railway carriages, waggons, and trucks, which improvements are also applicable to vehicles for common roads." *Letters Patent sealed.*

PRICE. 11th May 1860.

1158. GEORGE PRICE, of Wolverhampton, in the County of Stafford, Iron Safe and Lock Manufacturer, for an invention for—"Improvements in locks." *Letters Patent sealed.*

DOERING. 11th May 1860.

1159. FREDERICK BERNHARD DOERING, of Ebury Street, Eaton Square, in the County of Middlesex, for an invention for—"Apparatus for governing and regulating the speed of marine engines." *Provisional protection only.*

MACINTOSH. 11th May 1860.

1160. JOHN MACINTOSH, of North Bank, Regent's Park, in the County of Middlesex, for an invention for—"Improvements in artificial gums and setting and stopping teeth." *Provisional protection only.*

UTTLEY. BRAY. 11th May 1860.

1161. JAMES UTTLEY, Machinist, and JOSEPH BRAY, Overlooker, both of Staley Bridge, in the County of Chester, for an invention for—"Improvements in machinery or apparatus for spinning cotton, wool, silk, flax and other fibrous materials." *Provisional protection only.*

HOLCROFT. 11th May 1860.

1162. GEORGE HOLCROFT, of the City of Manchester, Engineer, for an invention for—"Certain improvements in the manufacture of iron." *Letters Patent sealed.*

RIDGE. 11th May 1860.

1163. SAMUEL RIDGE, of Hoviley Bridge, near Hyde, in the County of Chester, Millwright, for an invention for—"Improvements in the process of ageing printed woven fabrics." *Letters Patent sealed.*

GRANTHAM. SINNOCK. MAGNUS. 11th May 1860.

1164. JOHN GRANTHAM, of No. 31, Nicholas Lane, in the City of London, Engineer, WILLIAM SINNOCK, of 14, Warkworth Terrace, in the County of Middlesex, Ropery Engineer, and LAZARUS SIMON MAGNUS, of No. 3, Adelaide Place, in the City of London, Merchant, for an invention for—"Improvements in the manufacture of wire rope and in machinery for that purpose with special application to the manufacture of telegraph cables." *Provisional protection only.*

BROOMAN. 11th May 1860.

1165. RICHARD ARCHIBALD BROOMAN, of 166, Fleet Street, in the City of London, Patent Agent, for an invention for—"Improvements in driving or propelling railway rolling stock."—*A communication to him from abroad by Edouard Gouin, a foreigner residing in Marseilles.* *Letters Patent sealed.*

ROBERTSON. 11th May 1860.

1166. ANDREW ROBERTSON, of Neilston, in the County of Renfrew, North Britain, Bleacher, for an invention for—"Improvements in preventing smoke." *Letters Patent sealed.*

MORRELL. CHARNLEY. 11th May 1860.

1167. THOMAS HENRY MORRELL, Brick and Tile Manufacturer, of Leyland and Littlewood, in the County of Lancaster, and HENRY CHARNLEY, Ironfounder and Agricultural Implement Manufacturer, of Preston, in the same County, for an invention for—"An improved machine for making bricks and tiles and other articles from plastic materials." *Letters Patent sealed.*

WILSON. 11th May 1860.

1168. THOMAS WILSON, of Birmingham, in the County of Warwick, Engineer, for an invention for—"Improvements in projectiles and cartridges for fire-arms and ordnance." *Letters Patent sealed.*

NEWTON. 11th May 1860.

1169. WILIAM EDWARD NEWTON, of the Office for Patents, 66, Chancery Lane, in the County of Middlesex, Civil Engineer, for an invention for—"Improvements in electric conductors for telegraphic purposes, and in the apparatus for and mode or means of transmitting signals between distant places."—*A communication to him from abroad by Benjamin H. Wright, of Rome, in the United States of America.* *Letters Patent sealed.*

OWEN. VEITCH. 11th May 1860.

1170. JOSEPH OWEN, of Sheffield, in the County of York, Merchant, and GEORGE VEITCH, of Birmingham, in the County of Warwick, Merchant, for an invention for—"Improvements in the construction of the bottoms of bedsteads, mattresses, couches, sofas, seats, chairs and other articles for sitting or reclining upon, in order to render them more springy or elastic." *Letters Patent sealed.*

CLARK. 11th May 1860.

1171. WILLIAM CLARK, of 53, Chancery Lane, in the County of Middlesex, Engineer and Patent Agent, for an invention for—"Improvements in the manufacture of cyanides of barium and strontium."—*A communication to him from abroad by Messrs. Louis Joseph Frederic Margueritte, Chemist, and Alfred Lalouël de Sourdeval, both of Paris in the Empire of France.* *Letters Patent sealed.*

BROWN. MAY. 11th May 1860.

1172. WILLIAM BROWN, and CHARLES NEALE MAY, both of Devizes, in the County of Wilts, Engineers, for an invention for—"Improvements in brick making machines." *Provisional protection only.*

NASMYTH. 11th May 1860.

1173. THOMAS NASMYTH, of 31, Rue de l'Etoile, Brussels, in the Kingdom of Belgium, Gentleman, for an invention for—"Improvements in taps and valves."—*A communication to him by Charles Bacqueville, Mechanic, resident at No. 23, Quai de la haute Deüle, Lille, in the Empire of France.* *Provisional protection only.*

STEVENS. 12th May 1860.

1174. CHARLES STEVENS, Manager of the British and Foreign Office for Patents, 18, Welbeck Street, Cavendish Square, in the County of Middlesex, for an invention for—"An improved machine for raising water."—*A communication to him from abroad by Jean Baptiste Guignes, of Marseille, in the Empire of France.*

Provisional protection only.

BASFORD. 12th May 1860.

1175. WILLIAM BASFORD, of Burslem, in the County of Stafford, Brick and Tile Manufacturer, for an invention for—"Improvements in the mode of constructing brick walls, and in the mode of forming and ornamenting the materials to be used for the same." *Letters Patent sealed.*

YOUNG. 12th May 1860.

1176. ROBERT YOUNG, of Glasgow, in the County of Lanark, North Britain, Millwright, for an invention for—"Improvements in apparatus for cleaning grain." *Letters Patent sealed.*

SENIOR. STATTER. 12th May 1860.

1177. WILLIAM SENIOR, of Wakefield, in the County of York, Gentleman, and WILLIAM STATTER, of the same place, Surgeon, for an invention for—"Improvements in purifying gas, and thereby obtaining a useful product." *Provisional protection only.*

CHATTERTON. SMITH 12th May 1860.

1178. JOHN CHATTERTON, of Highbury Terrace, and WILLOUGHBY SMITH, of Pownall Road, Dalston, both in the County of Middlesex, for an invention for—"Improvements in electric telegraph conductors." *Letters Patent sealed.*

SALISBURY. 12th May 1860.

1179. SILAS C. SALISBURY, of Essex Street, Strand, in the City of Westminster, Gentleman, for an invention for—"An improved construction of metallic fencing."—*A communication to him from abroad by M. A. Myers, of New York, United States of America.* *Letters Patent sealed.*

PULLAN. CRESSWELL. LONGSTAFF. 12th May 1860.

1180. ABRAHAM PULLAN, of Fortie Cottage, New Cross, in the County of Kent, Engineer, THOMAS CRESSWELL, of Ravensbourne Terrace, Lewisham, in the same County, Engineer, and RICHARD LONGSTAFF, of Mornington Road, New Cross, in the same County, Pattern Maker, for an invention for—"Improvements in steam generators and in the means of or apparatus for superheating steam and in heating the feed water." *Letters Patent sealed.*

LILLEY. 14th May 1860.

1181. HENRY LOUIS LILLEY, of Stand Lane, in the County of Lancaster, Manager, for an invention for—"Improvements in machinery or apparatus for scraping starch." *Letters Patent sealed.*

LORD. 14th May 1860.

1182. EDWARD LORD, of Todmorden, in the County of York, Machine Maker, for an invention for—"Certain improvements in machinery for opening, blowing and cleaning cotton and other fibrous materials." *Letters Patent sealed.*

MUNTZ. KING. 14th May 1860.

1183. WILLIAM HENRY MUNTZ, of Millbrook, in the County of Hants, and HENRY KING, of the same place, Engineer, for an invention for—"Certain improvements in marine steam-engines, part of which is applicable also to ships' pumps." *Letters Patent sealed.*

NEWTON. 14th May 1860.

1184. WILLIAM EDWARD NEWTON, of the Office for Patents, 66, Chancery Lane, in the County of Middlesex, Civil Engineer, for an invention for—"An improvement in iron pavements."—*A communication to him from abroad by Baron Otto des Granges, of the City of St. Louis, Missouri, United States of America.*

Letters Patent sealed.

NEWTON. 14th May 1860.

1185. WILLIAM EDWARD NEWTON, of the Office for Patents, 66, Chancery Lane, in the County of Middlesex, Civil Engineer, for an invention for—"Improvements in the construction of metallic barometers."—*A communication to him from abroad by Felix Richard, of Paris.* *Letters Patent sealed.*

HOWARTH. 14th May 1860.

1186. THOMAS HOWARTH, of Preston, in the County of Lancaster, Roller Maker, for an invention for—"Improvements in machinery or apparatus applicable to looms for weaving and the tools employed therein." *Provisional protection only.*

JONES. OWEN. 14th May 1860.

1187. EDWARD TRYGARN JONES, of 8, Ashburnham Grove, Greenwich, in the County of Kent, and HENRY OWEN, of the Llantrisant Rectory, North Wales, for an invention for—"Improvements in roasting jacks." *Provisional protection only.*

READ. 15th May 1860.

1188. ROBERT READ, of Havelock Street, Leicester, for an invention for—"Improvements in the process of waterproofing fabrics for garments so as to allow perspiration to pass through the same." *Provisional protection only.*

STEVENS. 15th May 1860.

1189. CHARLES STEVENS, Manager of the British and Foreign Office for Patents, 1B, Welbeck Street, Cavendish Square, in the County of Middlesex, for an invention for—"An improved centrifugal turbine."—*A communication to him from abroad by Jacques Droctoxée Bailly, of Bourges, in the Empire of France.*

Provisional protection only.

SAX. 15th May 1860.

1190. ALPHONSE SAX, of Paris, France, Musical Instrument Maker, for an invention for—"A new mode of obtaining motive-power by the effect of weights and springs or by springs only in combination with proper connecting parts."

Provisional protection only.

SAMUELSON. 15th May 1860.

1191. BERNHARD SAMUELSON, Engineer, Britannia Works, Banbury, Oxon, for an invention for—"Improvements in reaping and mowing machines."

Provisional protection only.

SMITHARD. WHEATCROFT. 15th May 1860.

1192. SAMUEL SMITHARD, of Nottingham, Machinist, and HENRY WHEATCROFT, of 27, Fore Street, City of London, Manufacturer, for an invention for—"Improvements in the construction of machines for uniting portions of lace blond edging, nett and other fabrics, usually called 'running on' machines."

Provisional protection only.

BARTH. 15th May 1860.

1193. GEORGE HARMAN BARTH, of 217, Piccadilly, in the Parish of St. James, in the County of Middlesex, Operative Chymist, for an invention for—"Improvements in processes for aërating or super-saturating water and other fluids with oxygen or compounds of oxygen or other gas or gases." *Letters Patent sealed.*

HOOPER. 15th May 1860.

1194. BARTLETT HOOPER, of 43, King William Street, London Bridge, Chymist, for an invention for—"Improvements in the manufacture of a paper suitable for preventing forgery." *Provisional protection only.*

HIGGINS. WHITWORTH. 15th May 1860.

1195. JAMES HIGGINS, of Salford, in the County of Lancaster, Machine Maker, and THOMAS SCHOFIELD WHITWORTH, of the same place, Manager, for an invention for—"Improvements in machinery or apparatus for preparing and spinning cotton and other fibrous materials." *Letters Patent sealed.*

NEWTON. 15th May 1860.

1196. WILLIAM EDWARD NEWTON, of the Office for Patents, 66, Chancery Lane, in the County of Middlesex, Civil Engineer, for an invention for—"Improvements in valves and valve gear for the induction and eduction of steam to and from the cylinders of steam-engines, part of which is applicable to other purposes."—*A communication to him from abroad by Addison Crosby, Simeon Savage, and Herman Swift Stearns, all of Fredonia, in the County of Chautauque, and State of New York, United States of America.* *Letters Patent sealed.*

SALISBURY. 15th May 1860.

1197. SILAS C. SALISBURY, of Essex Street, in the City of Westminster, Gentleman, for an invention for—"An improved mode of and apparatus for churning butter."—*A communication to him from abroad by George W. Mears, of New York, in the United States of America."* *Letters Patent sealed.*

DENIS. 15th May 1860.

1198. JULIEN DENIS, of Queenhithe, in the City of London, Merchant, for an invention for—"Improvements in the preparation of vegetable matters as a pulp for the manufacture of paper."—*A communication to him from abroad by Mr. Henry Bouchet, of Quai Montebello, Paris, in the Empire of France.* *Letters Patent sealed.*

LARKINS. 15th May 1860.

1199. STEPHEN NORWOOD LARKINS, of Dover, in the County of Kent, Trinity Pilot, for an invention for—"Improved bathing apparatus."

Provisional protection only.

JORDAN. 15th May 1860.

1200. REUBEN JACOB JORDAN, of Berners Street, Oxford Street, in the County of Middlesex, Gentleman, for an invention for—"Improvements in pills."

Letters Patent sealed.

AGATA. 16th May 1860.

1201. DOMINGOS SANT AGATA, of Lisbon, in the Kingdom of Portugal, for an invention for—"An improved disinfectant." *Letters Patent sealed.*

SIMPSON. 16th May 1860.

1202. CORTLAND HERBERT SIMPSON, of Bexhill, in the County of Sussex, for an invention for—"Improvements in propelling vessels through the water, and apparatus connected therewith." *Provisional protection only.*

GRANT. 16th May 1860.

1203. JOHN GRANT, of Glen Grant, in the County of Moray, for an invention for—"Improvements in breakwaters." *Letters Patent sealed.*

CHRIMES. 16th May 1860.

1204. PETER CHRIMES, of 175, Collyhurst Road, Manchester, in the County of Lancaster, Glass Manufacturer, for an invention for—"Improvements in stoppering bottles, jars and other like vessels." *Provisional protection only.*

AMBLER. 16th May 1860.

1205. JOSEPH AMBLER, of Little Horton, in the Parish of Bradford, and County of York, for an invention for—"A new kind of cloth or woven fabric." *Provisional protection only.*

COWPER. 16th May 1860.

1206. CHARLES COWPER, of 20, Southampton Buildings, Chancery Lane, in the County of Middlesex, Patent Agent, for an invention for—"The manufacture and application to fibres and fabrics of a new blue colour and compounds of the same with other colours."—*A communication to him from abroad by Cyprien Marie Tessié du Motay, residing at Paris, in France.* *Letters Patent sealed.*

NEWTON. 16th May 1860.

1207. ALFRED VINCENT NEWTON, of the Office for Patents, 66, Chancery Lane, in the County of Middlesex, Mechanical Draughtsman, for an invention for—"An improved mode of treating oils for the production of gas and volatile oils."—*A communication to him from abroad by the "Société Parisienne pour l'éclairage au Gaz," of Paris, in the Empire of France.* *Letters Patent sealed.*

NEWTON. 16th May 1860.

1208. WILLIAM EDWARD NEWTON, of the Office for Patents, 66, Chancery Lane, in the County of Middlesex, Civil Engineer, for an invention for—"Improvements in locks for safes, doors and other purposes."—*A communication to him from abroad by Lyman Derby, of the City of New York.* *Letters Patent sealed.*

GUILLEMIN. 16th May 1860.

1209. CLAUDE MARIE GUILLEMIN, of No. 7, Rue Madame, Paris, M.D., for an invention for—"Improvements in submarine electric telegraphs." *Letters Patent sealed.*

KRUTZSCH. 17th May 1860.

1210. WILLIAM KRUTZSCH, of Chamber Street, Goodmans Fields, E., Engineer, for an invention for—"Improvements in mortars." *Letters Patent sealed.*

LOEWENSTEIN. 17th May 1860.

1211. CASPAR LOEWENSTEIN, of No. 37, Crutched Friars, in the City of London, Engineer, for an invention for—"Improvements in arrangements for paying out submarine cables." *Provisional protection only.*

MENNONS. 17th May 1860.

1212. MARC ANTOINE FRANÇOIS MENNONS, of the British and Foreign Patent Offices, 39, Rue de l'Echiquier, Paris, in the Empire of France, for an invention for—"An improved handle or holdfast for files, chisels and similar tools."—*A communication from Mr. Amédée Paillard, a person resident at Ste. Croix, near Geneva, Switzerland.* *Provisional protection only.*

MENNONS. 17th May 1860.

1213. MARC ANTOINE FRANÇOIS MENNONS, of the British and Foreign Patent Offices, 39, Rue de l'Echiquier, Paris, in the Empire of France, for an invention for—"Improvements in the cylinders and pistons of steam and other engines or machines propelled by aëriform fluids."—*A communication from Joseph Auguste Monnier, and Georges Brunier, both resident at Marseilles, Mechanical Engineers.* *Provisional protection only.*

MENNONS. 17th May 1860.

1214. MARC ANTOINE FRANÇOIS MENNONS, of the British and Foreign Patent Offices, 39, Rue de l'Echiquier, Paris, in the Empire of France, for an invention for—"An improved carriage brake or drag."—*A communication from Mr. J. L. Simon, a person resident at Tocqueville, in France.* *Letters Patent sealed.*

MENNONS. 17th May 1860.

1215. MARC ANTOINE FRANÇOIS MENNONS, of the British and Foreign Patent Offices, 39, Rue de l'Echiquier, Paris, in the Empire of France, for an invention for—"An improved railway brake."—*A communication from Oscar Prevosté, a person resident at Ham, in the Department of the Somme (France).* *Letters Patent sealed.*

NICHOLSON. 17th May 1860.

1216. JOSEPH NICHOLSON, of Chaple House, Hensingham, Whitehaven, in the County of Cumberland, Agricultural Implement Maker, for an invention for—"Improvements in reaping-machines." *Letters Patent sealed.*

DAVIES. 17th May 1860.

1217. GEORGE DAVIES, of No. 1, Serle Street, Lincoln's Inn, in the County of Middlesex, and No. 28, St. Enoch Square, in the City of Glasgow, Civil Engineer and Patent Agent, for an invention for—"A system of chromato-topo-chronographic charts intended to facilitate the study of universal history and chronology."—*A communication to him from abroad by Charles Rikli-Valet, of Wangen, Switzerland.* *Provisional protection only.*

ROBERTSON.
RITCHIE.
17th May 1860.

1218. ANDREW ROBERTSON, of Neilston, in the County of Renfrew, Bleacher, and ALEXANDER RITCHIE, of Glasgow, in the County of Lanark, Accountant, for an invention for—"Improvements in steam-boiler and other furnaces and in the prevention of smoke." *Letters Patent sealed.*

SALISBURY.
17th May 1860.

1219. SILAS C. SALISBURY, of Essex Street, in the City of Westminster, Gentleman, for an invention for—"Improvements in machinery and apparatus to be employed in weaving." *Letters Patent sealed.*

COLE.
17th May 1860.

1220. JAMES COLE, of Coventry, in the County of Warwick, Pattern Designer and Draftsman, for an invention for—"Improvements in looms for weaving." *Letters Patent sealed.*

IBBOTSON.
17th May 1860.

1221. ALFRED BUCKINGHAM IBBOTSON, of Sheffield, in the County of York, Steel and File Manufacturer, for an invention for—"Improvements in vices, part of which improvements is applicable to screw wrenches, spanners, turning lathes, and other tools and machines."—*A communication to him from abroad by Hiram Powers, of Florence.* *Letters Patent sealed.*

BROOMAN.
17th May 1860.

1222. RICHARD ARCHIBALD BROOMAN, of 166, Fleet Street, in the City of London, Patent Agent, for an invention for—"An improved mowing-machine."—*A communication to him from abroad by Arthur Legros, of Tournan, France.* *Provisional protection only.*

HOLDSWORTH.
HENDERSON.
HENDERSON.
BAGLEY.
17th May 1860.

1223. SAMUEL HOLDSWORTH, of the City of Durham, Engineer to Messieurs Henderson and Company, of the same place, Carpet Manufacturers, and JOHN HENDERSON, WILLIAM HENDERSON, and THOMAS BAGLEY, all of the said City of Durham, and members of the said firm of Henderson and Company, for an invention for—"Improvements in looms for weaving." *Letters Patent sealed.*

CONANT.
17th May 1860.

1224. HEZEKIAH CONANT, of Willimantic, in the County of Windham, and State of Connecticut, of the United States of America, for an invention for—"A new and useful improvement in mechanism for regulating the delivery or letting off of warp in looms for knitting or weaving." *Complete specification; Letters Patent sealed.*

DUNNICLIFF.
BATES.
17th May 1860.

1225. JOHN DEARMAN DUNNICLIFF, and STEPHEN BATES, Machine Maker, both of Nottingham, for an invention for—"Improvements in bobbin net or twist lace machines." *Letters Patent sealed.*

GEEVES.
17th May 1860.

1226. WILLIAM GEEVES, of the Caledonian Mills, New Wharf Road, Battle Bridge, in the County of Middlesex, for an invention for—"Improvements in saw-mills." *Letters Patent sealed.*

CLAYTON.
SHUTTLEWORTH.
17th May 1860.

1227. NATHANIEL CLAYTON, & JOSEPH SHUTTLEWORTH, of Stamp End Works, Lincoln, for an invention for—"Improvements in portable and traction engines." *Provisional protection only.*

NISSEN.
19th May 1860.

1228. HILARY NICHOLAS NISSEN, of Mark Lane, in the City of London, Engraver and Stationer, for an invention for—"Improvements in the preparation of paper in order to prevent the extraction or alteration of writings thereon without detection." *Letters Patent sealed.*

FIELDEN.
FIELDEN.
19th May 1860.

1229. SAMUEL FIELDEN, of Todmorden, in the County of Lancaster, Spinner and Manufacturer, and ABRAHAM FIELDEN, of the same place, Overlooker, for an invention for—"Improvements in self-acting mules for spinning." *Letters Patent sealed.*

FERGUSON.
19th May 1860.

1230. JAMES FERGUSON, of Paisley, in the County of Renfrew, North Britain, Galvanist, for an invention for—"Improvements in and connected with looms for weaving." *Letters Patent sealed.*

STEVENS.
19th May 1860.

1231. CHARLES STEVENS, Manager of the British and Foreign Office for Patents, 1B, Welbeck Street, Cavendish Square, in the County of Middlesex, for an invention for—"Improvements in striking clocks."—*A communication to him from abroad by Curé Valla, of Paris, in the Empire of France.* *Provisional protection only.*

TURNER.
19th May 1860.

1232. ALFRED ROGERS TURNER, of Malden, in the County of Middlesex, and State of Massachusetts, of the United States of America, for an invention for—"Certain new and useful improvements in pen-holders." *Complete specification; Letters Patent sealed.*

AMBLER.
19th May 1860.

1233. WILLIAM AMBLER, of Keighley, in the County of York, Paper Merchant, for an invention for—"Improvements in means or apparatus to facilitate the consumption of smoke in furnaces." *Provisional protection only.*

DAVEY.
19th May 1860.

1234. SAMUEL DAVEY, of 32, Hatton Garden, in the County of Middlesex, Manufacturing Jeweller, for an invention for—"Improvements in fastenings for attaching buttons, studs, brooches, or other ornaments and fastenings to articles of dress, and for other uses." *Letters Patent sealed.*

LEES.
19th May 1860.

1235. JOSIAH LEES, of Birmingham, in the County of Warwick, Gold Chain Manufacturer, for an invention for—"Improvements in the manufacture of swivels, hooks and rings for attaching and securing watches, chains or jewellery, parts of which improvements are applicable to key-rings, ear-rings, and other similar articles." *Letters Patent sealed*

NEWTON.
19th May 1860.

1236. ALFRED VINCENT NEWTON, of the Office for Patents, 66, Chancery Lane, in the County of Middlesex, Mechanical Draughtsman, for an invention for—"An improved liquid preparation of tobacco."—*A communication to him from abroad by George Jaques, of Somerville, County of Middlesex, and State of Massachusetts, United States of America.* *Letters Patent sealed.*

NEWTON.
19th May 1860.

1237. WILLIAM EDWARD NEWTON, of the Office for Patents, 66, Chancery Lane, in the County of Middlesex, Civil Engineer, for an invention for—"Improvements in looms for weaving carpets and other looped and pile fabrics."—*A communication to him from abroad by Charles Crossley, of New York, in the United States of America.* *Letters Patent sealed.*

NEWTON.
19th May 1860.

1238. WILLIAM EDWARD NEWTON, of the Office for Patents, 66, Chancery Lane, in the County of Middlesex, Civil Engineer, for an invention for—"Improvements in printing blocks for printing fibrous and textile fabrics."—*A communication to him from abroad by Thomas Crossley, of the City of New York.* *Letters Patent sealed.*

LONGMAID.
19th May 1860.

1239. JOHN LONGMAID, of Inver, in the County of Galway, Ireland, Manure Manufacturer, for an invention for—"Improvements in treating iron pyrites and other ores containing copper, silver and tin or either of them and sulphur." *Letters Patent sealed.*

BINKS.
MACQUEEN.
19th May 1860.

1240. CHRISTOPHER BINKS, of Parliament Street, Westminster, and JOHN MACQUEEN, of Old Jewry, in the City of London, for an invention for—"Improvements in treating certain manganese compounds for obtaining oxides of manganese and other products therefrom." *Letters Patent sealed.*

DE MEYER.
21st May 1860.

1241. CHARLES JOSEPH DE MEYER, of Brussels, in the Kingdom of Belgium, Piano-fortes Manufacturer, for an invention for—"Improvements in piano-fortes." *Complete specification; Letters Patent sealed.*

COPCUTT.
21st May 1860.

1242. JAMES COPCUTT, of 26, Kirby Street, Hatton Garden, in the County of Middlesex, Chemist, for an invention for—"Improvements in manufacturing gas and carbon or lamp black in one or the same apparatus, and in the apparatus employed therein, and for means and apparatus for rendering the gas applicable for lighting of ships, lighthouses, mines, and all other places where gas can be used." *Letters Patent sealed.*

BLAKELEY.
21st May 1860.

1243. THOMAS BLAKELEY, of Liverpool, in the County of Lancaster, Engineer, for an invention for—"Improvements in rotatory engines." *Letters Patent sealed.*

CROMPTON.
ROBERTSON.
21st May 1860.

1244. SAMUEL CROMPTON, of the City of Manchester, Gentleman, and WILLIAM ROBERTSON, of the same place, Mechanician, for an invention for—"A new method of economising water passing through canals when such water is used for dragging boats or otherwise." *Provisional protection only.*

TEULON.
21st May 1860.

1245. THOMAS WILLIAM TEULON, of Euston Road, in the County of Middlesex, for an invention for—"Improvements in chimney tops." *Letters Patent sealed; no specification filed.*

BARKER.
21st May 1860.

1246. WILLIAM BARKER, the younger, of Huyton Brewery, near Liverpool, in the County of Lancaster, for an invention for—"Improved apparatus for regulating the temperature of ale, beer, porter and other liquids during the process of fermentation." *Letters Patent sealed.*

CRAIG.
21st May 1860.

1247. JAMES CRAIG, of Paisley, in the County of Renfrew, North Britain, Machinist, for an invention for—"Improvements in cropping and clipping machines for the treatment of woven fabrics." *Letters Patent sealed.*

SAMUELS.
21st May 1860.

1248. SAMUEL RODGERS SAMUELS, of Nottingham, for an invention for—"Improvements in machinery used in weaving." *Letters Patent sealed.*

NIMMO.
21st May 1860.

1249. GEORGE NIMMO, of Glasgow, in the County of Lanark, North Britain, Steel Manufacturer, for an invention for—"Improvements in the manufacture of iron." *Provisional protection only.*

BAKER.
21st May 1860.

1250. VALENTINE BAKER, Lieutenant Colonel of Her Majesty's 10th Regiment of Hussars, of Hounslow, in the County of Middlesex, for an invention for—"Improvements in breech loading and other ordnance." *Provisional protection only.*

NEWTON.
21st May 1860.

1251. WILLIAM EDWARD NEWTON, of the Office for Patents, 66, Chancery Lane, in the County of Middlesex, Civil Engineer, for an invention for—"Improvements in the mode of and apparatus for winding clocks or other timekeepers."—*A communication to him from abroad by C. B. Hoard, of the United States of America.* *Letters Patent sealed.*

HOLLAND.
21st May 1860.

1252. ALFRED HOLLAND, of Queen Street, Oxford Street, in the County of Middlesex, Ironmonger, for an invention for—"An improvement in the construction of roller blinds." *Provisional protection only.*

MOULTON.
22nd May 1860.

1253. GEORGE MOULTON, of Manchester, in the County of Lancaster, Engineer, for an invention for—"Improvements in machinery for transferring to or tracing upon printing rollers or cylinders, copies of designs or patterns intended to be etched or engraved thereon." *Letters Patent sealed.*

WILSON.
HARRIS.
22nd May 1860.

1254. JOSEPH WILLIAM WILSON, of Buckingham Street, Strand, London, Civil Engineer, and JOHN HARRIS, Gresham Street, City of London, Stationer, for an invention for—"A new method of constructing and forming boxes or cases for containing and enclosing different articles more especially during their transmission by post or other conveyance." *Provisional protection only.*

GREEN.
22nd May 1860.

1255. JOHN GREEN, of Newtown, in the Parish of St. Martin, in the County of Worcester, Agriculturist, for an invention for—"Improvements in the construction of ploughs, cultivators and similar agricultural implements." *Letters Patent sealed.*

HOOD.
22nd May 1860.

1256. SAMUEL HOOD, of 68, Upper Thames Street, in the City of London, Iron Merchant, for an invention for—"The manufacture of improved wrought iron sash-frames and casements, and all kinds of wrought iron framing." *Letters Patent sealed; no specification filed.*

HINKS.
22nd May 1860.

1257. JAMES HINKS, of Birmingham, in the County of Warwick, Manufacturer, for an invention for—"Improvements in lamps for burning petroline and other liquid hydro-carbons, and in supports for the said lamps." *Letters Patent sealed.*

BLACKBURN.
CARR.
22nd May 1860.

1258. BEWICKE BLACKBURN, of Clapham Common, in the County of Surrey, and HENRY CARR, of Victoria Street, Westminster, in the County of Middlesex, for an invention for—"Improvements in railway axle boxes and axles." *Provisional protection only.*

MARLAND.
22nd May 1860.

1259. JOHN MARLAND, of Southport, in the County of Lancaster, Gentleman, for an invention for—"Improvements in preparing for and in warping and sizing woollen and worsted and other yarns and threads." *Provisional protection only.*

SHAW.
22nd May 1860.

1260. WILLIAM THOMAS SHAW, of 110, Bunhill Row, in the County of Middlesex, for an invention for—"Improvements in thaumatropes or phenakistoscopes." *Letters Patent sealed.*

BOTTOMLEY.
22nd May 1860.

1261. JOHN BOTTOMLEY, of Laister Dyke, near Bradford, in the County of York, General Agent, for an invention for—"Improvements in means or apparatus employed in spinning wool and other fibrous substances." *Letters Patent sealed.*

HICKISSON.
22nd May 1860.

1262. JAMES HICKISSON, of Maria Street, Kingsland Road, in the County of Middlesex, Manufacturer, for an invention for—"Improvements in means or apparatus for ascertaining the character of metals, particularly applicable to the detection of counterfeit coin." *Letters Patent sealed.*

GOLDIE.
22nd May 1860.

1263. JAMES GOLDIE, of Glasgow, in the County of Lanark, North Britain, Gentleman, for an invention for—"Improvements in furnaces and in the consumption or prevention of smoke." *Provisional protection only.*

PATON. 22nd May 1860.

1264. JOHN PATON, of Glasgow, in the County of Lanark, North Britain, Engineer, for an invention for—"Improvements in machinery or apparatus for winding, lifting and boring for mining purposes." *Letters Patent sealed.*

JOHNSON, 22nd May 1860.

1265. JOHN HENRY JOHNSON, of 47, Lincoln's Inn Fields, in the County of Middlesex, and of 166, Buchanan Street, in the City of Glasgow, North Britain, Gentleman, for an invention for—"Improvements in machinery or apparatus employed in spinning."—*A communication to him from abroad by Edmund Victory, of Watertown, Jefferson County, State of New York, United States of America.* *Letters Patent sealed.*

CLISSOLD. 22nd May 1860.

1266. WILLIAM CLISSOLD, of Dudbridge, in the County of Gloucester, Engineer, for an invention for—"An improvement in the manufacture of driving belts." *Letters Patent sealed.*

CLISSOLD. 22nd May 1860.

1267. WILLIAM CLISSOLD, of Dudbridge, in the County of Gloucester, Engineer, for an invention for—"An improvement in the construction of gearing wheels." *Provisional protection only.*

HENRY. 22nd May 1860.

1268. MICHAEL HENRY, of 84, Fleet Street, in the City of London, Patent Agent, for an invention for—"An improved mode of suspending gas-lights."—*A communication to him from abroad by Jean Claude Charles Gallibour, of 33, Boulevard Saint Martin, Paris, Mechanician.* *Letters Patent sealed.*

PAUL. 23rd May 1860.

1269. GEORGE PAUL, of Glasgow, in the County of Lanark, North Britain, Mechanic, for an invention for—"Improvements in machinery for winding yarn or thread." *Provisional protection only.*

COPE. 23rd May 1860.

1270. THOMAS COPE, of Liverpool, in the County of Lancaster, Tobacco Manufacturer, for an invention for—"Improvements in the treatment and preparation of tobacco." *Letters Patent sealed.*

BURNETT. 23rd May 1860.

1271. WILLIAM HICKLING BURNETT, of Margaret Street, in the County of Middlesex, Gentleman, for an invention for—"Improvements in electric telegraphs and in apparatuses employed therewith, a part of which improvements is applicable to the winding of clockwork." *Letters Patent sealed.*

CAVANAGH. 23rd May 1860.

1272. MICHAEL CAVANAGH, of Kensington, in the County of Middlesex, for an invention for—"Improvements in lock spindles." *Letters Patent sealed.*

CHEVALIER. 23rd May 1860.

1273. PIERRE ERNEST CHEVALIER, of 29, Boulevart St. Martin, Paris, in the Empire of France, Manufacturer, for an invention for—"An improved table stand for the support of glasses and other articles." *Letters Patent sealed.*

BARTHOLOMEW. 23rd May 1860.

1274. GEORGE BARTHOLOMEW, of the Town and County of Linlithgow, North Britain, Edge Tool Maker, for an invention for—"Improvements in shoes for the feet of horses and other animals." *Letters Patent sealed.*

COLLYER. 23rd May 1860.

1275. ROBERT HANHAM COLLYER, of Alpha Road, Regent's Park, M.D., for an invention for—"Improvements in the manufacture of tubes and other vessels and other articles, and in the machinery and apparatus connected therewith." *Letters Patent sealed.*

ATKINSON. 23rd May 1860.

1276. CHARLES FANSHAWE ATKINSON, of Sheffield, in the County of York, Steel Manufacturer, for an invention for—"Certain improvements in the manufacture of chains." *Provisional protection only.*

SUMMERSCALES, SAGAR. 23rd May 1860.

1277. JOHN SUMMERSCALES, Machine Maker, and JUBAL SAGAR, Engineer, both of Keighley, in the County of York, for an invention for—"Improvements in washing, wringing, mangling, squeezing and crushing machines." *Provisional protection only.*

HEPPLESTON. 23rd May 1860.

1278. THOMAS HEPPLESTON, of the City of Manchester, Machinist, for an invention for—"An improvement or improvements in breach loading fire-arms and in projectiles to be used therewith." *Letters Patent sealed.*

HOWARD. 23rd May 1860.

1279. WILLIAM HOWARD, of 23, Great Russell Street, in the County of Middlesex, for an invention for—"An improved window blind." *Provisional protection only.*

MULKAY. 23rd May 1860.

1280. DENIS MULKAY, of No. 69, Rue Rasière, Brussels, in the Kingdom of Belgium, Mechanic, for an invention for—"Improvements in springs for supporting or distending ladies' dresses." *Letters Patent sealed.*

BARKER. 23rd May 1860.

1281. WILLIAM HENRY BARKER, of the Borough of Kingston-upon-Hull, for an invention for—"Improvements in moulds for candles." *Provisional protection only*

DE BOUSSOIS. 23rd May 1860.

1282. FRANÇOIS JOSEPH EDOUARD DUCLOS DE BOUSSOIS, of 16, Place Vendome, Paris, in the Empire of France, Civil and Mining Engineer, for an invention for—"Improvements in the manufacture of tubes, hollow axles, shafts, gun barrels, masts, and other tubular metal articles." *Provisional protection only.*

DE BOUSSOIS. 23rd May 1860.

1283. FRANÇOIS JOSEPH EDOUARD DUCLOS DE BOUSSOIS, of 16, Place Vendome, Paris, in the Empire of France, Civil and Mining Engineer, for an invention for—"Improvements in the treatment of bituminous rocks for the extraction of bitumen therefrom, and in the application of the residuum to various useful purposes." *Provisional protection only*

SHARP. 24th May 1860.

1284. JOHN SHARP, of Bradford, in the County of York, Machine Maker, for an invention for—"Improvements in looms for weaving." *Provisional protection only.*

HEIGHWAY. 24th May 1860.

1285. RICHARD HUSBAND HEIGHWAY, of the Strand, in the County of Middlesex, for an invention for—"An improved cooking apparatus." *Provisional protection only.*

JOHNSON. 24th May 1860.

1286. THOMAS JOHNSON, of Plumstead, in the County of Kent, Engineer, for an invention for—"Improvements in machines for washing bottles and jars." *Letters Patent sealed.*

CLAPHAM. CAIL. 24th May 1860.

1287. ROBERT CALVERT CLAPHAM, of Walker, in the County of Northumberland, Analytical Chemist, and RICHARD CAIL, of Gateshead, in the County of Durham, Chemical Manufacturer, for an invention for—"Improved deodorizing agents." *Letters Patent sealed.*

BAKER. 24th May 1860.

1288. WILLIAM BAKER, of Sheffield, in the County of York, Chemist, for an invention for—"Improvements in the manufacture or production of white lead." *Letters Patent sealed.*

NEWTON. 24th May 1860.

1289. WILLIAM EDWARD NEWTON, of the Office for Patents, 66, Chancery Lane, in the County of Middlesex, Civil Engineer, for an invention for—"Improved machinery or apparatus for mixing and moulding materials for the manufacture of fuel, part of which machinery or apparatus is applicable to moulding bricks and other analogous articles."—*A communication to him from abroad by Messrs. Couillard and Mazeline, of Havre, in the Empire of France.* *Letters Patent sealed.*

PADDON. LOWTHER. 24th May 1860.

1290. JOHN PADDON, Esquire, M.B., of Swansea, and WILLIAM LOWTHER, Esquire, of Briton Ferry, near Neath, South Wales, for an invention for—"Improvements in coke ovens."—*A communication to them from abroad by Henry Eaton, of Nantes, and Bordeaux, France.* *Letters Patent sealed.*

PRINCE. 24th May 1860.

1291. FREDERIC WALLER PRINCE, of 15, Wellington Street, London Bridge, in the County of Surrey, Gun Maker, for an invention for—"Improvements in fire-arms and ordnance." *Letters Patent sealed.*

DEBLOCK-STEVENS 25th May 1860.

1292. ERMELINDE DE BLOCK-STEVENS, of Antwerp, in the Kingdom of Belgium, Ladies' Stays Manufacturer, for an invention for—"Improvements in ladies stays." *Letters Patent sealed.*

WADDELL. 25th May 1860.

1293. CHARLES DOUGLAS WADDELL, of Queen's Terrace, Bayswater, in the County of Middlesex, Esquire, and Captain in Her Majesty's Indian Army, for an invention for—"Improvements in ordnance and firearms and in the application and arrangement of the propelling agents with which they are charged." *Provisional protection only.*

INGHAM. COLLIER. 25th May 1860.

1294. JOHN INGHAM, of Halifax, in the County of York, Manufacturer, and GEORGE COLLIER, of the same place, Engineer, for an invention for—"Improvements in the manufacture of fabric of the character of that technically called 'camlet.'" *Provisional protection only.*

MACINTOSH. 25th May 1860.

1295. JOHN MACINTOSH, of North Bank, Regent's Park, in the County of Middlesex, for an invention for—"Improvements in breech loading fire-arms, ordnance, cartridges, and projectiles." *Letters Patent sealed.*

HUBART. CANTILLON. 25th May 1860.

1296. ALFRED HUBART, and VICTOR CANTILLON, of Liege, in the Kingdom of Belgium, for an invention for—"Improvements in the manufacturing of glass casks and barrels." *Letters Patent sealed.*

FINCH.
25th May 1860.

1297. BENJAMIN FINCH, of Beaufort Square, Chepstow, for an invention for—"An improvement in the arrangement of the rudders of ships and vessels."
Provisional protection only.

DICKINS.
M°CULLOCH.
25th May 1860.

1298. THOMAS DICKINS, of Middleton, in the County of Lancaster, Esquire, and GILBERT M°CULLOCH, of Manchester, in the said County, Mechanic, for an invention for—"Improvements in machinery or apparatus for spinning and doubling silk, cotton and other fibrous materials." *Letters Patent sealed.*

WALLIS.
25th May 1860.

1299. GEORGE WALLIS, of No. 16, Victoria Grove, Fulham Road West, Brompton, in the County of Middlesex, Artist, for an invention for—"New or improved methods of preparing drawings, writings, designs, prints or impressions of engravings and photographs, for the purpose of impressing or engraving the same in or upon metallic surfaces and thereby producing printing or embossing surfaces or ornamental metallic surfaces for such purposes as the same are or may be applicable to, also new or improved machinery to be employed in the said impressing or engraving."
Letters Patent sealed.

DE LAIRE.
GIRARD.
26th May 1860.

1300. GEORGES DE LAIRE, and CHARLES GIRARD, Chemists of the Imperial Mint, Paris, in the Empire of France, for an invention for—"A new process for manufacturing red and violet colouring matter." *Letters Patent sealed.*

HUGHES.
26th May 1860.

1301. EDWARD THOMAS HUGHES, of the firm of Hughes and Son, 123, Chancery Lane, London, Patent Agent, for an invention for—"Improved methods of obtaining artificial light, and in the apparatus and burners connected therewith."—*A communication to him from abroad by Gustav Arnold Kühne, of Berlin, in the Kingdom of Prussia.* *Letters Patent sealed.*

MOULE.
26th May 1860.

1302. JOHN MOULE, of 15, Seabright Place, Hackney Road, in the County of Middlesex, Chemist, for an invention for—"An improved apparatus applicable to flushing purposes." *Provisional protection only.*

ELLIOT.
26th May 1860.

1303. GEORGE ELLIOT, of the Hall, Houghton-le-Spring Fence Houses, Durham, Colliery Owner, for an invention for—"Improvements in weighing coal at the screen and in apparatus for the same." *Letters Patent sealed.*

JONES.
26th May 1860.

1304. GILBERT DANIEL JONES, of Pentonville, in the County of Middlesex, Engineer, for an invention for—"Improvements in the manufacture of sand, emery and glass papers and cloths, and in the machinery employed therein."
Letters Patent sealed.

BROOMAN.
26th May 1860.

1305. RICHARD ARCHIBALD BROOMAN, of 166, Fleet Street, in the City of London, Patent Agent, for an invention for—"Treating certain animal substances in order to obtain albuminous, gummy, glutinous and glairy products, and fat."—*A communication to him from abroad by Benjamin Paraf-Javal, of Paris.*
Letters Patent sealed.

DOWLER.
FARMER.
26th May 1860.

1306. GEORGE DOWLER, and GEORGE JAMES FARMER, of Birmingham, in the County of Warwick, Manufacturers, for an invention for—"Improvements in machinery for the manufacture of boot heels and tips, and coins, medals, tokens, checks and such like articles." *Letters Patent sealed.*

DALE.
CARO.
26th May 1860.

1307. JOHN DALE, of Manchester, in the County of Lancaster, Manufacturing Chemist, and HEINRICH CARO, of the same place, Chemist, for an invention for—"Improvements in obtaining colouring matters for dyeing and printing."
Letters Patent sealed.

CHATWOOD.
28th May 1860.

1308. SAMUEL CHATWOOD, of "The Liver Safe Works," Bolton, and Liverpool, and 22, South John Street, and 27, South Castle Street, Liverpool, also of 16, Hoghton Street, Southport, all in the County of Lancaster, for an invention for—"Improvements in iron safes and in locks for the same, which locks are also applicable to other purposes." *Letters Patent sealed.*

ROBINSON.
28th May 1860.

1309. GEORGE ROBINSON, of the Town and County of the Town of Newcastle-upon-Tyne, Doctor of Medicine, for an invention for—"Improvements in the manufacture of salts and preparations of ammonia." *Letters Patent sealed.*

WELCH.
28th May 1860.

1310. JOSEPH JAMES WELCH, of the firm of Welch, Margetson and Company, of Cheapside, in the City of London, for an invention for—"Improvements in collars for gentlemen's, ladies' or children's wear." *Provisional protection only.*

MURPHY. 28th May 1860.

1311. WILLIAM JEREMIAH MURPHY, of Cork, Ireland, Brewer, for an invention for—"An improved motive-power engine." *Provisional protection only.*

COLTMAN. 28th May 1860.

1312. THOMAS COLTMAN, of Gas Street, Leicester, for an invention for—"Improvements in the manufacture of reels for reeling cotton and other thread." *Provisional protection only.*

JOHNSON. 28th May 1860.

1313. JOHN HENRY JOHNSON, of 47, Lincoln's Inn Fields, in the County of Middlesex, and of 166, Buchanan Street, in the City of Glasgow, North Britain, Gentleman, for an invention for—"Improvements in ruffles or gathered fabrics, and in the apparatus employed in their manufacture."—*A communication to him from abroad by George B. Arnold, and Alfred Arnold, both of the City, County, and State of New York, in the United States of America.* *Letters Patent sealed.*

TASKER. 28th May 1860.

1314. WILLIAM TASKER, the younger, of Waterloo Iron Works, near Andover, in the County of Hants, Engineer and Agricultural Implement Manufacturer, for an invention for—"Improvements in straw-shakers for threshing-machines." *Letters Patent sealed.*

DITCHFIELD. 28th May 1860.

1315. HENRY DITCHFIELD, of Culceth, near Manchester, in the County of Lancaster, Overlooker, for an invention for—"Improvements in machinery or apparatus for folding woven fabrics." *Provisional protection only.*

MOULE. BANNEHR. 28th May 1860.

1316. The Reverend HENRY MOULE, of Fordington, in the County of Dorset, Clerk, and JAMES BANNEHR, of Exeter, Agent, for an invention for—"Improvements in the nature and construction of closets and commodes for the reception and removal of excrementitious and other offensive matter, and in the manufacture of manure from thence." *Letters Patent sealed.*

SCHIELE. 29th May 1860.

1317. CHRISTIAN SCHIELE, of Bebbington, in the County of Cheshire, for an invention for—"Improvements in the manufacture of lubricants."—*A communication to him from abroad by Ferdinand Wendelin Kleist, of Berlin, in Prussia.* *Letters Patent sealed.*

DUFOSSÉ. 29th May 1860.

1318. EUGÈNE DUFOSSÉ, of No. 1, Place Valenciennes, or No. 35, Rue Lafayette, Paris, in the Empire of France, for an invention for—"A system of skeleton or framework with continuous free air currents applicable to the construction and improvement of seats of any description, mattresses, saddles, and upholstery generally, with a view to render them 'hygienic.'" *Complete specification; Letters Patent sealed.*

BERCK. 29th May 1860.

1319. CHARLES BERCK, of Herve, in the Kingdom of Belgium, Spinner, for an invention for—"Improvements in the manufacture of the selvages of woollen cloths and other stuffs." *Letters Patent sealed.*

GULLICK. 29th May 1860.

1320. THOMAS GULLICK, of Pall Mall, in the County of Middlesex, for an invention for—"An improved spur box." *Letters Patent sealed.*

DUGDALE. DUGDALE. 29th May 1860.

1321. JOHN DUGDALE, Junior, and EDWARD DUGDALE, both of Blackburn, in the County of Lancaster, Machine Makers and Cotton Spinners, for an invention for—"Improvements in the construction of journals and bearings for shafts, spindles and other similar articles." *Letters Patent sealed.*

JONES. 29th May 1860.

1322. WRIGHT JONES, of Pendleton, near Manchester, in the County of Lancaster, Engineer, for an invention for—"Improvements in machinery or apparatus for doubling or cuttling woven fabrics, paper and other similar materials." *Letters Patent sealed.*

NOSWORTHY. 29th May 1860.

1323. WILLIAM SAMUEL NOSWORTHY, of Coleman Street, in the City of London, Pianoforte Manufacturer, for an invention for—"Improvements in pianofortes." *Letters Patent sealed.*

HEINDRYCKX. 29th May 1860.

1324. FLORIDE HEINDRYCKX, of Brussels, Engineer, for an invention for—"Improvements in the construction of railway chairs." *Letters Patent sealed.*

SAMUELSON. 29th May 1860.

1325. ALEXANDER SAMUELSON, of Scott Street Foundry, Hull, for an invention for—"Improvements in gun boats." *Provisional protection only.*

TRAYES. 29th May 1860.

1326. JOHN TRAYES, of Belfast, in the County of Antrim, Ireland, Engineer, for an invention for—"Improvements in steam-boilers or steam and heat generators, and in the application of heat." *Letters Patent sealed.*

HUGHES.
29th May 1860.

1327. HESKETH HUGHES, of Homerton, in the County of Middlesex, Engineer, for an invention for—"Improvements in machinery for goffering, fluting, shaping, embossing and connecting together lace, ribbons and other like materials, parts of which improvements are also applicable to the shaping and corrugating of metals."
Letters Patent sealed.

PATERSON.
29th May 1860.

1328. ALEXANDER JOHN PATERSON, of the City of Edinburgh, Gentleman, for an invention for—"Improvements in agricultural traction engines and implements."
Letters Patent sealed.

COLLYER.
29th May 1860.

1329. ROBERT HANHAM COLLYER, of Alpha Road, Regent's Park, M.D., for an invention for—"Improvements in telegraph cables also applicable to other similar purposes." *Letters Patent sealed.*

GORDON.
30th May 1860.

1330. THOMAS GORDON, of No. 41, King Street, Soho, Westminster, in the County of Middlesex, for an invention for—"Improvements in inkstands."
Provisional protection only.

D'ARGY.
30th May 1860.

1331. EDMOND ARMAND LOUIS D'ARGY, of 29, Boulevart St. Martin, Paris, in the Empire of France, Manufacturer, for an invention for—"An improved candlestick." *Letters Patent sealed.*

COX.
30th May 1860.

1332. FRANCIS BLAKEMORE COX, of Birmingham, in the County of Warwick, Manufacturer, for an invention for—"Improvements in measuring rules."
Provisional protection only.

PICKSTONE.
BACON.
30th May 1860.

1333. WILLIAM PICKSTONE, of Radcliffe, Cotton Spinner, and WILLIAM BACON, of Southport, both in the County of Lancashire, for an invention for—"Improvements in machinery for dyeing, washing, and sizing." *Provisional protection only.*

GREENWAY.
30th May 1860.

1334. CHARLES GREENWAY, of 4, Albert Place, Cheltenham, for an invention for—"Improvements in the manufacture of salt and in apparatus used therein."
Letters Patent sealed.

CARLESS.
30th May 1860.

1335. EUGENE CARLESS, of Bow Common, in the County of Middlesex, for an invention for—"Improvements in the manufacture of all kinds of candles for the purpose of rendering them free from guttering." *Provisional protection only.*

NEWTON.
30th May 1860.

1336. WILLIAM EDWARD NEWTON, of the Office for Patents, 66, Chancery Lane, in the County of Middlesex, Civil Engineer, for an invention for—"Certain improvements in machinery for preparing and spinning hemp and similar fibrous materials."—*A communication to him from abroad by Joseph Compton Todd, and Philip Rafferty, of Paterson, in the County of Passaic, and State of New Jersey, United States of America.* *Letters Patent sealed.*

BOWDITCH.
31st May 1860.

1337. WILLIAM RENWICK BOWDITCH, Clerk, of Saint Andrew's, Wakefield, in the County of York, for an invention for—"Improvements in the purification of coal gas and of coal oils." *Letters Patent sealed.*

FLETCHER.
31st May 1860.

1338. LAVINGTON EVANS FLETCHER, of Upper Norwood, in the County of Surrey, for an invention for—"Improvements in steam-engines and boilers and their appurtenances." *Provisional protection only.*

ROWBOTHAM.
31st May 1860.

1339. SAMUEL ROWBOTHAM, of Putney, in the County of Surrey, Physician, for an invention for—"Improvements in the composition and manufacture of soap."
Letters Patent sealed.

NEWTON.
31st May 1860.

1340. ALFRED VINCENT NEWTON, of the Office for Patents, 66, Chancery Lane, in the County of Middlesex, Mechanical Draughtsman, for an invention for—"Improvements in the application of steam to the warming of buildings and apartments, and in apparatus therefor."—*A communication to him from abroad by Lewis Walker Leeds, and Calvert Vaux, of the City of New York, United States of America.*
Letters Patent sealed.

ALDIN.
31st May 1860.

1341. CHARLES ALDIN, of Clapham Park, in the County of Surrey, Builder, for an invention for—"An improvement in the construction of paving tiles."
Letters Patent sealed.

FARRELL.
31st May 1860.

1342. WILLIAM FARRELL, of St. Helen's, in the County of Lancaster, Chemist, for an invention for—"Improvements in apparatus used in hoisting and lowering as applied to mine shafts." *Provisional protection only.*

MANNING. 31st May 1860.

1343. JAMES ALEXANDER MANNING, of the Inner Temple, in the County of Middlesex, Esquire, for an invention for—"Improvements in the treatment, application and use of sewerage matters and the general wastes of towns and factories." *Letters Patent sealed.*

KINNIBURGH. 31st May 1860.

1344. JOHN KINNIBURGH, of Shott's Iron Works, in the County of Lanark, North Britain, Foundry Manager, for an invention for—"Improvements in the manufacture or production of metal pipes and other generally similar tubular articles." *Letters Patent sealed.*

MACKENZIE. HAMILTON. 31st May 1860.

1345. GEORGE MACKENZIE, of Paisley, in the County of Renfrew, North Britain, Thread Manufacturer, and JOHN HAMILTON, of Glasgow, in the County of Lanark, North Britain, Commission Merchant, for an invention for—"Improvements in bobbins or holders for textile materials." *Provisional protection only.*

MENDAY. 31st May 1860.

1346. JOSEPH MENDAY, of Quarry House, Frindsbury, Rochester, in the County of Kent, for an invention for—"Improvements in kilns employed in and for the manufacture of cement." *Provisional protection only.*

HARFIELD. 31st May 1860.

1347. WILLIAM HORATIO HARFIELD, of Royal Exchange Buildings, in the City of London, for an invention for—"Improvements in capstans and windlasses, and in shackling chains." *Letters Patent sealed.*

CLAY. 31st May 1860.

1348. CHARLES CLAY, of Walton Grange, Wakefield, in the County of York, for an invention for—"Improvements in implements for scarifying and grubbing or cutting up weeds and otherwise cultivating land." *Letters Patent sealed.*

THRELFALL. 1st June 1860.

1349. RICHARD THRELFALL, of Bolton, in the County of Lancaster, Machine Maker, for an invention for—"Improvements in the spinning machinery commonly called self-acting mules." *Letters Patent sealed; no specification filed.*

CRESSWELL. LISTER. 1st June 1860.

1350. THOMAS CRESSWELL, of Huddersfield, in the County of York, Merchant, and HENRY LISTER, of the same place, Manufacturer and Finisher, for an invention for—"Improvements in or applicable to fabrics composed of wool, cotton, silk or other fibrous substances or combinations of these or other fibrous substances." *Letters Patent sealed.*

PARSONS. 1st June 1860.

1351. GEORGE PARSONS, of Martock, in the County of Somerset, Engineer, for an invention for—"Improvements in the manufacture of carts, wagons, and drays." *Provisional protection only.*

GREENWOOD. BATLEY. 1st June 1860.

1352. THOMAS GREENWOOD, and JOHN BATLEY, both of Leeds, in the County of York, Machine Makers, for an invention for—"Improved machinery for cutting and shaping wood." *Letters Patent sealed.*

NEWTON. 1st June 1860.

1353. WILLIAM EDWARD NEWTON, of the Office for Patents, 66, Chancery Lane, in the County of Middlesex, Civil Engineer, for an invention for—"A new and improved regulator for gas burners."—*A communication to him from abroad by George Washington Crummey, of the City of New York, United States of America.* *Provisional protection only.*

HUNTER. 1st June 1860.

1354. ANDREW GEORGE HUNTER, of 43, Dean Street, Newcastle-upon-Tyne, the younger, for an invention for—"Improvements in the manufacture of chlorine." *Letters Patent sealed.*

NEWELL. 1st June 1860.

1355. THOMAS FREDERICK NEWELL, of Cloak Lane, Cheapside, in the City of London, for an invention for—"Improvements in punching the leaves of cheque and other books and other papers."—*The result partly of communication from abroad made to him by Antoine Lapointe, of 21, Rue de l'Echiquier, France, and partly of invention and discovery made by himself.* *Provisional protection only.*

STRATFORD. 2nd June 1860.

1356. WILLIAM STRATFORD, of Mile-End Old Town, in the County of Middlesex, Engineer, for an invention for—"Improvements in fire bars." *Letters Patent sealed.*

LANCASTER. BROWN. HUGHES. 2nd June 1860.

1357. CHARLES WILLIAM LANCASTER, of New Bond Street, in the County of Middlesex, Gunmaker, JAMES BROWN, of Newport, in the County of Monmouth, Iron Master, and JOHN HUGHES, also of Newport, aforesaid, Engineer, for an invention for—"Improvements in cannon and other ordnance." *Letters Patent sealed.*

AUSTIN. 2nd June 1860.

1358. JAMES AUSTIN, of Mill Isle Mills, Donaghadee, in the County of Down, Ireland, Book Keeper, for an invention for—"Improvements in traction engines in connexion with machinery or apparatus for ploughing or cultivating land."
Provisional protection only.

HORNER. 2nd June 1860.

1359. GEORGE HORNER, of Falls Road, Belfast, in the County of Antrim, Machinist, for an invention for—"Improvements in hackling flax and other fibrous materials, and in machinery for the same." *Provisional protection only.*

NEWTON. 2nd June 1860.

1360. WILLIAM EDWARD NEWTON, of the Office for Patents, 66, Chancery Lane, in the County of Middlesex, Civil Engineer, for an invention for—"An improved permutation lock."—*A communication to him from abroad by William A. Carpenter, of Elgin, State of Illinois, United States of America.*
Letters Patent sealed.

NEWTON. 2nd June 1860.

1361. WILLIAM EDWARD NEWTON, of the Office for Patents, 66, Chancery Lane, in the County of Middlesex, Civil Engineer, for an invention for—"Improved machinery for kneading or preparing clay for the manufacture of bricks or other articles made from plastic materials."—*A communication to him from abroad by Claus H. Clausen, of Broager, in the Kingdom of Denmark.* *Provisional protection only.*

SMITH. 2nd June 1860.

1362. WILLIAM WILMER HENRY SMITH, of Birmingham, in the County of Warwick, Leather Merchant, for an invention for—"Improvements in the mode of preparing leather for harness and boot and shoe manufacturers."
Letters Patent sealed.

JAMES. 4th June 1860.

1363. ISAAC JAMES, of Tivoli Works, Cheltenham, in the County of Gloucester, Machinist, for an invention for—"Improvements in washing, wringing, and mangling machines." *Letters Patent sealed.*

TAYLOR. 4th June 1860.

1364. WILLIAM TAYLOR, of Nursling, near Southampton, in the County of Hants, Gentleman, for an invention for—"An improved handlight or portable greenhouse to be used for growing and protecting plants, either with or without artificial heat." *Letters Patent sealed; no specification filed.*

JUCKES. 4th June 1860.

1365. JOHN JUCKES, of Newgate Street, in the City of London, for an invention for—"Improvements in pipes for smoking tobacco." *Letters Patent sealed.*

PASCAL. 4th June 1860.

1366. JEAN BAPTISTE PASCAL, of 29, Boulevart St. Martin, Paris, in the Empire of France, Civil Engineer, for an invention for—"Improvements in obtaining motive-power and in apparatus for the same." *Provisional protection only.*

GEDGE. 4th June 1860.

1367. WILLIAM EDWARD GEDGE, of the firm of John Gedge and Son, of No. 11, Wellington Street, Strand, London, Patent Agent, for an invention for—"Improved machinery or apparatus for manuring land."—*A communication to him from abroad by Jean Eugène Pillier, of Lieusaint, in the Empire of France, Agricultural Implement Maker.* *Provisional protection only.*

WATEAU. 4th June 1860.

1368. CLOVIS WATEAU, Merchant, of Marle, Aisne, in the Empire of France, for an invention for—"An improved apparatus for cooling beer and other liquids."
Provisional protection only.

PINCHES. 4th June 1860.

1369. JOHN PINCHES, of No. 27, Oxendon Street, Haymarket, in the County of Middlesex, Die Sinker and Medallist, for an invention for—"An improved press for embossing and stamping paper, linen, and other fabrics and substances."
Letters Patent sealed.

REID. 4th June 1860.

1370. THOMAS REID, of Monkton Miln, in the County of Ayr, North Britain, Farmer, for an invention for—"Improvements in machinery, apparatus or means for actuating or working railway brakes." *Provisional protection only.*

TAYLOR. 5th June 1860.

1371. WILLIAM TAYLOR, of Nursling, near Southampton, in the County of Hants, Gentleman, for an invention for—"The improved heating of hothouses and other buildings by means of flat pipes made of any malleable material and for manufacturing thereof." *Provisional protection only.*

MABSON. 5th June 1860.

1372. JOHN MABSON, of Sheffield, in the County of York, for an invention for—"Improvements in metal life-buoys, also adapted for holding water or other liquids."
Letters Patent sealed.

SENIOR. 5th June 1860.

1373. CHARLES SENIOR, of Deadwaters, near Huddersfield, in the County of York, for an invention for—"Apparatus for utilising the waste heat in the flues of steam and other engines." *Letters Patent sealed.*

FLETCHER. 5th June 1860.

1374. GEORGE FLETCHER, of Farnham Place, Southwark, in the County of Surrey, Engineer, for an invention for—"Improvements in the apparatus for regulating the draft in the tubes of multitubular boilers."—*A communication to him from abroad by Donald Skekel, and Alexander Skekel, of Demerara.* *Letters Patent sealed.*

RICHER 5th June 1860.

1375. FRANÇOIS CHARLES RICHER, of the Waterloo Road, in the County of Surrey, Civil Engineer, for an invention for—"Improvements in breech loading fire-arms and in their cartridges." *Provisional protection only.*

TRENTER. 5th June 1860.

1376. WILLIAM TRENTER, of 44, Clerkenwell Green, in the County of Middlesex, for an invention for—"Improvements in washing and wringing machines." *Provisional protection only.*

JARDIN. GIRARD. 5th June 1860.

1377. JOSEPH JARDIN, Mechanician, and PAUL ADRIEN GIRARD, Merchant, both of 29, Boulevart St. Martin, Paris, in the Empire of France, for an invention for—"A new or improved machinery for manufacturing bricks, tiles and other ceramic products." *Provisional protection only.*

DE CARVALHO. 5th June 1860.

1378. ANTONIO JOAQUIM PEREIRA DE CARVALHO, of 61, Moorgate Street, in the City of London, for an invention for—"Improvements in beams applicable in the construction of bridges and other structures, and also for the floors and ceilings of houses." *Letters Patent sealed.*

LAVENDER. LAVENDER. 5th June 1860.

1379. EDWARD LAVENDER, and ROBERT LAVENDER, of 31, Bromley Street, Commercial Road, Stepney, in the County of Middlesex, for an invention for—"Improvements in destructive and vinous distillation." *Letters Patent sealed.*

BOWER. 5th June 1860.

1380. GEORGE BOWER, of St. Neots, in the County of Huntingdon, Gas Engineer, for an invention for—"Improvements in apparatus for manufacturing, controlling and regulating the flow of gas." *Letters Patent sealed.*

APSEY. BUCKWELL. 5th June 1860.

1381. JOSEPH APSEY, of Cornwall Road, Lambeth, in the County of Surrey, Engineer, and WILLIAM GEORGE BUCKWELL, of the Phœnix Stone Works, East Greenwich, in the County of Kent, Engineer, for an invention for—"Improvements in steam-boiler and other furnaces." *Provisional protection only.*

HADFIELD. 5th June 1860.

1382. GEORGE HADFIELD, of Carlisle, in the County of Cumberland, Varnish Manufacturer, for an invention for—"Improvements in the manufacture of casks or barrels, and in the machinery to be used therein." *Letters Patent sealed.*

JENKINS. 5th June 1860.

1383. GEORGE and JOSEPH JENKINS, Brothers, of 17, Young's Buildings, Hare Court, Aldersgate Street, in the City of London, Iron Bedstead Makers, for an invention for—"An improved portable arm chair." *Provisional protection only.*

SCHUHMAN. HARRISON. 6th June 1860.

1384. SIGISMUND SCHUHMAN, Cotton Manufacturer, and GEORGE HARRISON, Overlooker, both of Burnley, in the County of Lancaster, for an invention for—"Improvements in machinery or apparatus for spinning, doubling and winding fibrous materials." *Provisional protection only.*

HUGHES. 6th June 1860.

1385. EDWARD THOMAS HUGHES, of the firm of Hughes & Son, Patent Agents, 123, Chancery Lane, London, for an invention for—"Improvements in coating or plating the faces of printing type and stereotype plates."—*A communication to him from abroad by Joseph Corduan, of New York, United States of America."* *Letters Patent sealed.*

WENHAM. 6th June 1860.

1386. FRANCIS HERBERT WENHAM, of Brixton, in the County of Surrey, Engineer, for an invention for—"Improvements in steam-engines." *Letters Patent sealed.*

STEVENS. 6th June 1861.

1387. CHARLES STEVENS, Manager of the British and Foreign Office for Patents, No. 1B, Welbeck Street, Cavendish Square, in the County of Middlesex, for an invention for—"A new material for packing and other purposes, together with the apparatus used in the manufacture thereof."—*A communication to him from abroad by Jean Pezieux, Balthazar Masson, & Antoine Meillard, of Lyons, in the Empire of France.* *Complete specification; Letters Patent sealed.*

STEVENS. 6th June 1860.

1388. CHARLES STEVENS, Manager of the British and Foreign Office for Patents, No. 1B, Welbeck Street, Cavendish Square, in the County of Middlesex, for an invention for—"An improved mode of preparing various plants to be used in the manufacture of paper."—*A communication to him from abroad by Eugène Helenus, of Paris, in the Empire of France.* *Letters Patent sealed.*

DESCHAMPS. 6th June 1860.

1389. MARCEL GRIPON DESCHAMPS, of Number 261, Strand, in the County of Middlesex, Metallurgist, for an invention for—"Improvements in machinery for carving and sculpturing." *Provisional protection only.*

JEWSBURY. 6th June 1860.

1390. JOSEPH JEWSBURY, of Kinver, in the County of Stafford, Machinist, for an invention for—"Certain improvements in machinery for the manufacture of screws." *Letters Patent sealed.*

HADFIELD. ATTKINS. 6th June 1860.

1391. CHARLES HADFIELD, of Hadfield, in the County of Derby, and WILLIAM ALFRED ATTKINS, of the same place, for an invention for—"Improvements in machinery for preparing, making and moulding bricks, tiles and other articles formed of clay, peat or other materials." *Letters Patent sealed.*

HOOLEY. WOOD. 6th June 1860.

1392. PETER HOOLEY, and JOHN WOOD, both of Manchester, in the County of Lancaster, Cotton Wadding Manufacturers, for an invention for—"An improvement in the manufacture of cotton wadding and in machinary or apparatus connected therewith." *Letters Patent sealed.*

SAUNDERS. PIPER. 6th June 1860.

1393. JOHN SAUNDERS, and JOSEPH PIPER, of Cookley Iron Works, Kidderminster, for an invention for—"Improvements in the manufacture of tin and terne plates." *Letters Patent sealed.*

CRANSTON. 6th June 1860.

1394. WILLIAM M^cINTYRE CRANSTON, of 58, King William Street, London Bridge, for an invention for—"Improvements in reaping-machines."—*The result partly of communication from abroad made to him by Walter Abbott, and William Anson Wood, of Hoosick Falls, Rensselair, U. S. of America, and partly of invention and discovery made by himself.* *Letters Patent sealed.*

BROWN. 7th June 1860.

1395. JAMES BROWN, of No. 2, Ribchester Terrace, Bridge Road, Stratford, in the County of Essex, Machinist, for an invention for—"Improvements in fire bars, retorts, and other appliances connected with furnaces, &c." *Letters Patent sealed.*

MILLER. 7th June 1860.

1396. THOMAS WILLIAM MILLER, of Her Majesty's Dockyard, Portsmouth, for an invention for—"Improvements in boilers or steam generators." *Letters Patent sealed.*

VANGENEBERG. 7th June 1860.

1397. PIERRE VANGENEBERG, of la Chapelle St. Denis, Paris, in the Empire of France, Practical Engineer, for an invention for—"Improved locomobile steam saw-mill." *Letters Patent sealed.*

BATH. 7th June 1860.

1398. JAMES PARKER BATH, of Aigburth, near Liverpool, in the County of Lancaster, Coach Proprietor, for an invention for—"Improvements applicable to carriage wheels for use on common highways, railroads, or tramways." *Provisional protection only.*

KINGSLEY. 7th June 1860.

1399. JEFFRIES KINGSLEY, of 52, Great Coram Street, in the County of Middlesex, Lieutenant on Half Pay of Her Majesty's Third Regiment of Dragoons, for an invention for—"Improvements in testing screw propellers and paddle wheels." *Provisional protection only.*

HIGGINBOTHAM. BEECH. 7th June 1860.

1400. EDWIN HENRY HIGGINBOTHAM, of Macclesfield, in the County of Chester, Silk Manufacturer, and AARON BEECH, of the same place, Mechanic, for an invention for—"Certain improvements in machinery or apparatus for the prevention of explosions of steam-boilers arising through deficiency of water or over pressure of steam." *Provisional protection only.*

BROMWICH. 7th June 1860.

1401. ROBERT BROMWICH, General Cock Founder, Liquor, Fountain, and Beer Machine Manufacturer, of Birmingham, in the County of Warwick, for an invention for—"An improved cock for drawing off or regulating the flow of liquids or fluids." *Provisional protection only.*

HUGHES. 7th June 1860.

1402. EDWARD JOSEPH HUGHES, of the City of Manchester, in the County of Lancaster, Patent Agent, for an invention for—"Certain improvements in machinery or apparatus for roving, spinning, and doubling cotton, wool, flax and other fibrous materials."—*A communication to him from abroad by William Henry Rhodes, Machinist, and Theodor Rüdiger, Engineer, both of Chemnitz, in the Kingdom of Saxony.* *Letters Patent sealed.*

CLARK. 7th June 1860.

1403. WILLIAM CLARK, of 53, Chancery Lane, in the County of Middlesex, Engineer and Patent Agent, for an invention for—"Improvements in electric telegraph apparatus."—*A communication to him from abroad by Pier Alberto Balestrini, of Paris, in the Empire of France, Engineer.* *Provisional protection only.*

CLARK.
7th June 1860.

1404. WILLIAM CLARK, of 53, Chancery Lane, in the County of Middlesex, Engineer and Patent Agent, for an invention for—"Improvements in the preservation of animal and vegetable matters."—*A communication to him from abroad by Jules Réné Lion, of 29, Boulevart St. Martin, Paris, in the Empire of France, Proprietor.* *Letters Patent sealed.*

MICHEL-SAINTON.
7th June 1860.

1405. EUSTACHE MICHEL-SAINTON, of 29, Boulevart St. Martin, Paris, in the Empire of France, Manufacturer, for an invention for—"Improvements in knitting processes and in apparatus for the same." *Letters Patent sealed.*

JACOBY.
REDGATE.
STONES.
7th June 1860.

1406. MORITZ JACOBY, of the Town of Nottingham, Merchant, JAMES REDGATE, of Sneinton, in the County of Nottingham, Lace Manufacturer, and JOSEPH STONES, of the Town of Nottingham, aforesaid, Designer and Draughtsman, for an invention for—"Improvements in the manufacture of bobbin net or lace in bobbin net machines." *Letters Patent sealed.*

COOKSON.
7th June 1860.

1407. GEORGE JOHN COOKSON, of Dorset Street, in the City of London, Printer, for an invention for—"Improvements in gas regulators."—*A communication to him from abroad by James Gabriel Pavyer, of Saint Louis, U.S.A.* *Letters Patent sealed.*

WALLER.
7th June 1860.

1408. GEORGE ARTHUR WALLER, of Saint James' Gate, in the City of Dublin, Engineer, for an invention for—"Improvements in apparatus for filtering and solidifying." *Letters Patent sealed.*

WRIGHT.
8th June 1860.

1409. JAMES WRIGHT, of 42, Bridge Street, Blackfriars, City of London, Civil Engineer, for an invention for—"An improved apparatus for washing and separating metals or their ores from impurities or other foreign matters which are mixed with them."—*A communication to him from abroad by Messers Barrè Rougnon & Company, of Paris.* *Letters Patent sealed.*

KANE.
8th June 1860.

1410. GREGORY KANE, of Numbers 69 and 70, Dame Street, in the City of Dublin, in that part of the United Kingdom of Great Britain and Ireland, called Ireland, Camp-Furniture Manufacturer, for an invention for—"The making or fabricating in wood, metal, or other suitable substances, bedsteads capable of being collapsed into a convenient size and form for transport as personal luggage, and to be styled, 'Kane's portable folding bedstead.'" *Complete specification; Letters Patent sealed.*

BOUSFIELD.
8th June 1860.

1411. GEORGE TOMLINSON BOUSFIELD, of Loughborough Park, Brixton, in the County of Surrey, for an invention for—"Improvements in machinery for the manufacture of barbed and other needles for knitting and sewing."—*A communication to him from abroad by J. J. Greenough, of 6, Wall Street, New York.* *Provisional protection only.*

CROLL.
8th June 1860.

1412. ALEXANDER ANGUS CROLL, of Coleman Street, in the City of London, Engineer, for an invention for—"Improvements in the purification of gas." *Letters Patent sealed.*

MACKENZIE.
8th June 1860.

1413. GEORGE MACKENZIE, of Paisley, in the County of Renfrew, North Britain, Thread Manufacturer, for an invention for—"Improvements in machinery or apparatus for twisting and doubling yarns and thread." *Letters Patent sealed.*

MONKS.
8th June 1860.

1414. JAMES MONKS, of Alton, in the County of Hants, Engineer, for an invention for—"Improvements in the rails and chairs of railways." *Provisional protection only.*

GRIMALDI.
8th June 1860.

1415. PHILIPPE GRIMALDI, M.D., of Teramo, in the Kingdom of Naples, now residing at No. 26, Great Prescott Street, in the County of Middlesex, for an invention for—"Improvements in steam-generators." *Provisional protection only.*

JOSLIN.
JOSLIN.
JOSLIN.
8th June 1860.

1416. GEORGE JOSLIN, HENRY CRUSH JOSLIN, and JOHN JOSLIN, all of Colchester, in the County of Essex, Ironmongers, for an invention for—"Improvements in reaping machines." *Letters Patent sealed.*

NEWTON.
8th June 1860.

1417. WILLIAM EDWARD NEWTON, of the Office for Patents, 66, Chancery Lane, in the County of Middlesex, Civil Engineer, for an invention for—"Certain improvements in sewing-machines."—*A communication to him from abroad by Albert Gould Allen, of New York, in the United States of America.* *Letters Patent sealed.*

RICHARDSON. 8th June 1860.

1418. WILLIAM RICHARDSON, of No. 2, Moreton Place, Kentish Town Road, in the County of Middlesex, Civil Engineer, for an invention for—"An improved method of joining and fixing together drain, water or gas pipes made of burnt clay or other earthy, vegetable or mineral matter, thereby rendering them air and water tight, and preventing leakage." *Provisional protection only.*

STEVENS. 9th June 1860.

1419. CHARLES STEVENS, Manager of the British and Foreign Office for Patents, No. 1B, Welbeck Street, Cavendish Square, in the County of Middlesex, for an invention for—"Improvements in smoke consuming furnaces."—*A communication to him from abroad by Toni Fontenay, of Grenoble, in the Empire of France.* *Provisional protection only.*

WESTWOOD. 9th June 1860.

1420. JOSEPH WESTWOOD, of Tredegar House, Bow, in the County of Middlesex, Ship Builder, for an invention for—"Improvements in armour plates for iron ships and vessels or forts or batteries." *Letters Patent sealed.*

MATLEY. 9th June 1860.

1421. RICHARD MATLEY, of Manchester, in the County of Lancaster, Calico Printer, for an invention for—"Certain improvements in machinery or apparatus for printing woven fabrics." *Provisional protection only.*

GEDGE. 9th June 1860.

1422. WILLIAM EDWARD GEDGE, of the firm of John Gedge and Son, of No. 11, Wellington Street, Strand, London, Patent Agent, for an invention for—"Improved apparatus for separately collecting the divers metals of which mineral ores and their gangues are composed."—*A communication to him from abroad by Randal Cresswell, of the Rue Malher, Paris, in the Empire of France.* *Provisional protection only.*

BREESE. 9th June 1860.

1423. CHARLES BREESE, of Birmingham, in the County of Warwick, Manufacturer, for an invention for—"Improvements in metal bedsteads." *Letters Patent sealed.*

ROMAINE. 9th June 1860.

1424. ROBERT ROMAINE, late of Canada West, but now of Myddelton Square, in the County of Middlesex, Gentleman, for an invention for—"Improvements in the construction of steam-boilers and condensers." *Letters Patent sealed.*

COMBE. 9th June 1860.

1425. JAMES COMBE, of Belfast, in the Kingdom of Ireland, for an invention for—"Improvements in roving and slubbing frames, and in the means of transmitting power thereto and to machinery generally." *Letters Patent sealed.*

CALVERT. LOWE. CLIFT. 11th June 1860.

1426. FREDERICK CRACE CALVERT, of the City of Manchester, in the County of Lancaster, Professor of Chemistry, CHARLES LOWE, of the same place, Analytical Chemist, and SAMUEL CLIFT, of the same place, Manufacturing Chemist, for an invention for—"Improvements in the manufacture of colouring matters." *Letters Patent sealed.*

JOHNSON. ADAMSON. 11th June 1860.

1427. WILLIAM JOHNSON, of Nailor Street Foundry, Liverpool, in the County of Lancaster, Millwright and Engineer, and ISAIAH ADAMSON, of Liverpool, aforesaid, Millwright, for an invention for—"Improvements in hydraulic or other like presses and in the apparatus connected therewith for extracting oils from seeds." *Letters Patent sealed.*

DE TIVOLI. 11th June 1860.

1428. VITAL DE TIVOLI, of 18, Stanley Place, Pimlico, London, in the County of Middlesex, for an invention for—"Improvements in civil and military ambulances." *Letters Patent sealed.*

JOHNSON. 11th June 1860.

1429. JOHN HENRY JOHNSON, of 47, Lincoln's Inn Fields, in the County of Middlessex, and of 166, Buchanan Street, in the City of Glasgow, North Britain, Gentlemen, for an invention for—"Improvements in governors or regulators for steam-engines."—*A communication to him from abroad by Narcisse Duvoir, of Paris, in the Empire of France, Mechanical Engineer.* *Provisional protection only.*

SALMON. 11th June 1860.

1430. PETER SALMON, of Glasgow, in the County of Lanark, Merchant, for an invention for—"Improvements in furnaces and in feeding steam-boilers." *Letters Patent sealed.*

BLAKELY. 11th June 1860.

1431. ALEXANDER THEOPHILUS BLAKELY, of Holywood, in the County of Down, Captain, Half Pay, Royal Artillery, for an invention for—"An improvement in rolls or rolling mills." *Provisional protection only.*

SOMMELET. 11th June 1860.

1432. HUBERT SOMMELET, of Paris, in the French Empire, Manufacturer, for an invention for—"Certain improvements in the manufacture of scissors." *Letters Patent sealed.*

REDWOOD. 12th June 1860.

1433. THEOPHILUS REDWOOD, of 19, Montague Street, Russell Square, in the County of Middlesex, for an invention for—"Improvements in the manufacture of paper." *Letters Patent sealed.*

FARRAR. FARRAR. 12th June 1860.

1434. JABEZ BUNTING FARRAR, and JOSHUA FARRAR, of Halifax, in the County of York, Machine Makers, for an invention for—"Improvements in machinery or apparatus for spinning and doubling or twisting wool, mohair, alpaca, cotton, silk, flax or other fibrous substances." *Letters Patent sealed.*

CLARKE. 12th June 1860.

1435. JOHN CLARKE, of Heaton Norris, in the County of Lancaster, Machine Maker, for an invention for—"An improved registering apparatus applicable to guages for steam, water, vacuum, heat and similar purposes, and also an improved mode of weighting or balancing the ordinary index finger of guages." *Letters Patent sealed.*

YATES. 12th June 1860.

1436. THOMAS CHADWICK YATES, of Strangeways, in the City of Manchester, Cricket Bat and Stump Maker, for an invention for—"The manufacture of adjustable spikes for attaching to shoes or other coverings for the feet." *Letters Patent sealed.*

WILLIS. CHELL. 12th June 1860.

1437. THOMAS WILLIS, and GEORGE CHELL, both of Longsight, near the City of Manchester, Machine Makers, for an invention for—"Improvements in machinery for twisting, doubling and winding yarn and thread." *Letters Patent sealed.*

HYDE. 12th June 1860.

1438. ROBERT HYDE, of Kirkby, in the County of Leicester, Groom, for an invention for "Improvements in apparatus for draining stables." *Letters Patent sealed.*

FROMONT. 12th June 1860.

1439. PHILIPPE FROMONT, of Chatelinau, Province of Hainaut, Belgium, Manufacturer, for an invention for—"Improvements in machinery for the ascending and descending in pits or mines of workmen, waggons, carriages, and materials." *Provisional protection only.*

LOEWENSTEIN. 12th June 1860.

1440. CASPAR LOEWENSTEIN, of No. 37, Crutched Friars, in the City of London, Engineer, for an invention for—"Improvements in arrangements for paying out submarine cables." *Letters Patent sealed.*

BURROWS. 12th June 1860.

1441. GEORGE BURROWS (of the firm of Messieurs Hartshorn and Burrows, of the Town and County of the Town of Nottingham), Lace Manufacturer, for an invention for—"Improvements in the manufacture of figured lace made on bobbin net machines." *Provisional protection only.*

NEWTON. 12th June 1860.

1442. ALFRED VINCENT NEWTON, of the Office for Patents, 66, Chancery Lane, in the County of Middlesex, Mechanical Draughtsman, for an invention for—"An improved carriage ventilator."—*A communication to him from abroad by Asa Hopgood, of Worcester, in the State of Massachusetts, United States of America.* *Letters Patent sealed.*

CATLIN. 12th June 1860.

1443. GEORGE CATLIN, of the City of New York, in the United States of America, but now residing at Manchester, in the County of Lancaster, Gentleman, for an invention for—"Improvements in the construction of ships and other floating bodies." *Letters Patent sealed.*

FIRMIN. FIRMIN. 12th June 1860.

1444. GEORGE FIRMIN, and CORNELIUS FIRMIN, both of Ipswich, in the County of Suffolk, Manufacturers, for an invention for—"Improvements in the manufacture of sacking and in apparatus for the same." *Letters Patent sealed.*

THIERRY. 12th June 1860.

1445. JACQUES HIPPOLYTE THIERRY, of Paris, in the French Empire, Merchant, for an invention for—"Improvements in the manufacture and composition of ink for printing." *Provisional protection only.*

PELLISSIER. 13th June 1860.

1446. LOUIS PELLISSIER, of Bordeaux, France, Mechanician, for an invention for—"An improved apparatus for lifting and moving blocks of stone or other heavy materials or loads." *Provisional protection only.*

LANCASTER. 13th June 1860.

1447. JOHN LANCASTER, Garden Farm, Dunmurry, Belfast, for an invention for—"Improvements in whet-stones commonly called scythe stones." *Letters Patent sealed.*

SPENCE. 13th June 1860.

1448. WILLIAM SPENCE, of No. 50, Chancery Lane, in the County of Middlesex, Patent Agent, for an invention for—"Improvements in the mode of and apparatus for reducing silicious substances to a fluid state."—*A communication to him from abroad by George E. Vanderburgh, of New York, in the United States of America.* *Letters Patent sealed.*

WESTON. PRICE. 13th June 1860.

1449. WILLIAM WESTON, of Camden Town, in the County of Middlesex, Baker, and BENJAMIN PRICE, of Mile End, in the same County, Furnace Builder, for an invention for—"Improvements in ovens for baking." *Letters Patent sealed.*

CHATWIN. 13th June 1860.

1450. GEORGE HENRY CHATWIN, of Gresham Street, in the City of London, Merchant, for an invention for—"An improvement in the ribs of parasols and other like articles." *Provisional protection only.*

NEWTON. 13th June 1860.

1451. ALFRED VINCENT NEWTON, of the Office for Patents, 66, Chancery Lane, in the County of Middlesex, Mechanical Draughtsman, for an invention for—"An improved construction of weighing-machine."—*A communication to him from abroad by S. E. Robbins, of Boston, in the United States of America.* *Letters Patent sealed.*

BOWEN. 13th June 1860.

1452. JOHN JAMES BOWEN, of 136, Great Dover Street, Southwark, in the County of Surrey, and 308, Euston Road, in the County of Middlesex, Pewterer, for an invention for—"Improvements in soldering irons heated by gas." *Provisional protection only.*

DELAURETIS. 14th June 1860.

1453. GAETANO DELAURETIS, of Naples, in the Kingdom of the Two Sicilies, but now residing at 48, Frith Street, Soho Square, in the County of Middlesex, England, for an invention for—"An improvement in preventing and detecting forgery or alteration of figures in cheques, bank-notes, drafts, bills of exchange, promissory notes, and other monetary bills." *Provisional protection only.*

HENRY. 14th June 1860.

1454. MICHAEL HENRY, of 84, Fleet Street, in the City of London, Patent Agent, for an invention for—"Improvements in treating vegetable substances so as to obtain paper-pulp and other useful products therefrom."—*A communication to him from abroad by Louis Henry Obert, Jean Baptiste Vasseur, and Auguste Houbigant, all of 33, Boulevard St. Martin, Paris, France.* *Letters Patent sealed.*

WHITESMITH. STEVEN. 14th June 1860.

1455. ISAAC WHITESMITH, of Glasgow, in the County of Lanark, North Britain, Machinist, and JAMES STEVEN, also of Glasgow, aforesaid, Factory Manager, for an invention for—"Improvements in looms for weaving." *Letters Patent sealed.*

SPARKHALL. 14th June 1860.

1456. EDWARD SPARKHALL, of Cheapside, in the City of London, for an invention for—"Improvements in producing certain designs and patterns upon cloth or textile fabrics, in order to procure certain effects in garments made therefrom." *Letters Patent sealed; no specification filed.*

DOOLEY. MAWSON. 15th June 1860.

1457. JOHN DOOLEY, of Dukinfield, in the County of Chester, and JAMES MAWSON, of the same place, Engineers, for an invention for—"An improved equilibrium slide valve applicable to engines worked by steam or other motive-power." *Provisional protection only.*

PREDAVALLE. 15th June 1860.

1458. BARTOLOMMEO PREDAVALLE, of Bloomsbury Street, Bloomsbury Square, in the County of Middlesex, Civil Engineer, for an invention for—"A new mode of and apparatus for producing and obtaining motive-power." *Provisional protection only.*

DAVIES. 15th June 1860.

1459. GEORGE DAVIES, of No. 1, Serle Street, Lincoln's Inn, in the County of Middlesex, and No. 28, St. Enoch Square, in the City of Glasgow, Civil Engineer and Patent Agent, for an invention for—"An improved life-preserving mattress."—*A communication to him from abroad by Louis Bauhoefer, of Philadelphia, in the United States of America.* *Letters Patent sealed.*

MACKROW. 15th June 1860.

1460. ISAAC MACKROW, of Woodstock Road, Poplar, in the County of Middlesex, for an invention for—"Improvements in alarum locks and latches." *Provisional protection only.*

WEST. 15th June 1860.

1461. JAMES WEST, of Birmingham, in the County of Warwick, Brassfounder, for an invention for—"An improvement in the bowls or rollers of castors for furniture." *Letters Patent sealed.*

COLES. 15th June 1860.

1462. COWPER PHIPPS COLES, of the United Service Club, Pall Mall, Captain in the Royal Navy, for an invention for—"Improvements in iron-cased ships of war." *Letters Patent sealed.*

BROOMAN. 15th June 1860.

1463. RICHARD ARCHIBALD BROOMAN, of 166, Fleet Street, in the City of London, Patent Agent, for an invention for—"Improvements in desiccating substances, and in neutralizing or retaining any fœtid gases which may be evolved in the process."—*A communication to him from abroad by Messieurs Légé and Danguy, of Paris.* *Letters Patent sealed.*

HARDING.
15th June 1860.

1464. WILLIAM HARDING, of Rutland Terrace, Forest Hill, in the County of Kent, for an invention for—" Improvements in breech loading fire-arms." *Letters Patent sealed.*

COATES.
16th June 1860.

1465. CHARLES COATES, of Sunnyside, near Rawtenstall, in the County of Lancaster, Manager, for an invention for—" Improvements in the construction of breaks for carriages." *Provisional protection only.*

MYERS.
MYERS.
HILL.
16th June 1860.

1466. MYER MYERS and MAURICE MYERS, trading under the style or firm of Myers & Son, Steel Pen Manufacturers, of Birmingham, in the County of Warwick, and WILLIAM HILL, Manager to the said firm, also of Birmingham, aforesaid, for an invention for—" Certain improvements in holders and connectors for holding papers and fancy-wares exposed for sale or for private use." *Letters Patent sealed.*

MOULE.
16th June 1860.

1467. JOHN MOULE, of No. 15, Seabright Place, Hackney Road, in the County of Middlesex, Manufacturing Chemist, for an invention for—" An improved self acting apparatus for precipitating and collecting from solutions metals and their salts, part of which apparatus is applicable to flushing purposes." *Letters Patent sealed.*

DRAY.
GARDINER.
16th June 1860.

1468. WILLIAM DRAY and ROBERT GARDINER, both of Farningham, in the County of Kent, Agricultural Engineers, for an invention for—" Improvements in reaping and mowing machines." *Letters Patent sealed.*

PAVYER.
16th June 1860.

1469. BENJAMIN PAVYER, of Bartholomew Close, in the City of London, Type Founder, for an invention for—" Certain new or improved machinery for 'rubbing' type."—*A communication to him from abroad by James Gabriel Pavyer, of Saint Louis, United States.* *Provisional protection only.*

DEANE.
MARSH.
16th June 1860.

1470. EDWARD DEANE, of 1, Arthur Street East, London Bridge, in the City of London, Engineer, and WILLOUGHBY DIGBY MARSH, of 11, James Street, in the County of Middlesex, Captain in Her Majesty's Royal Engineers, for an invention for—" Improvements in kitchen ranges or apparatus for cooking." *Letters Patent sealed.*

HICKMAN.
16th June 1860.

1471. JOHN HICKMAN, of Brampton Ash, in the County of Northampton, Iron-Stone Master, for an invention for—" Improvements in draw bars for railway carriages and trucks." *Provisional protection only.*

HENDERSON.
16th June 1860.

1472. CHARLES HENDERSON, of Leicester, Clock and Watch Maker, for an invention for—" Improvements in flooring and bench cramps." *Provisional protection only.*

CLARK.
16th June 1860.

1473. WILLIAM CLARK, of 53, Chancery Lane, in the County of Middlesex, Engineer and Patent Agent, for an invention for—" Improvements in storing and preserving grain and in the apparatus connected therewith."—*A communication to him from abroad by Mr. Charles Joseph Emile Pavy, of 29, Boulevart St. Martin, Paris, Agricultural Proprietor.* *Letters Patent sealed.*

WIDNELL.
16th June 1860.

1474. HENRY WIDNELL, of Lasswade, in the County of Edinburgh, Scotland, for an invention for—" Improvements in printing and steaming threads and yarns of worsted and other materials for carpets and other fabrics, and in the apparatus employed therein." *Letters Patent sealed.*

STONE.
16th June 1860.

1475. EDWARD STONE, of 46, Lime Street, in the City of London, Merchant, for an invention for—" Improvements in machinery for cutting veneers."—*A communication to him from abroad by John Ahsbohs, residing at Forty-third Street, New York, United States of America.* *Letters Patent sealed.*

KERSHAW.
18th June 1860.

1476. THOMAS KERSHAW, of Baker Street, Portman Square, in the County of Middlesex, House Painter and Decorator, for an invention for—" Improvements in apparatus for imitating various fancy woods, marbles, granites, and stencillings." *Letters Patent sealed.*

KING.
SOUTHAM.
18th June 1860.

1477. JOHN KING, of Wellesbourne, in the County of Warwick, Farmer, and FREDERICK SOUTHAM, of Eatington, in the County of Warwick, Blacksmith, for an invention for—" A new or improved rope porter to be used in steam ploughing or cultivating." *Provisional protection only.*

NICHOLSON.
18th June 1860.

1478. HAMLET NICHOLSON, of Drake Street, in the Borough of Rochdale, in the County of Lancaster, Shopkeeper, for an invention for—" A new and improved cricket and playing ball." *Letters Patent sealed.*

DRESSEL. FIGGE. 18th June 1860.

1479. ROBERT DRESSEL, of Amelia Villas, De Beauvoir Grove, Kingsland Road, and AUGUSTUS FIGGE, of High Holborn, both in the County of Middlesex, for an invention for—"Improvements in the manufacture of yeast."
Provisional protection only.

KEATES. 18th June 1860.

1480. THOMAS WILLIAM KEATES, of Chatham Place, Blackfriars, in the City of London, Consulting Chemist, for an invention for—"An improved mode of separating carbonic acid gas from the gaseous products derived from the distillation of peat and other vegetable matter." *Letters Patent sealed.*

BRABY. 19th June 1860.

1481. JAMES BRABY, the younger, of Bridge House Place, in the Borough of Southwark, Wheelwright, for an invention for—"Improved machinery for lifting or breaking up roads or ways, crushing clods, and scarifying or tilling land."
Letters Patent sealed.

CHILDS. 19th June 1860.

1482. AUGUSTUS BRYANT CHILDS, of 481, New Oxford Street, in the County of Middlesex, for an invention for—"Improvements in the manufacture of a portable pocket match safe."—*A communication to him from abroad by Albert M. Smith, of New York, in the United States of America.* *Letters Patent sealed.*

ARROTT. 19th June 1860.

1483. ALEXANDER ROBERTSON ARROTT, of Saint Helen's, in the County of Lancaster, Chemist, for an invention for—"Improvements in the manufacture of carbonate of soda." *Provisional protection only.*

BARAGWANATH. 19th June 1860.

1484. MICHAEL BARAGWANATH, of Church Lane, Truro, in the County of Cornwall, Machinist, for an invention for—"An improved portable hydraulic punch."—*A communication to him from abroad by Richard Dudgeon, of the City of New York, in the United States of America.* *Provisional protection only.*

HARRISON. 19th June 1860.

1485. JOSEPH HARRISON, of Glossop, in the County of Derby, Overlooker of Spinners, for an invention for—"Certain improvements in machines for spinning cotton and other fibrous substances." *Letters Patent sealed.*

WALKER. 19th June 1860.

1486. JOHN WALKER, of the City Road, in the County of Middlesex, Engineer, for an invention for—"Improvements in mills or machinery for expressing juice from the cane and other like vegetable substances." *Letters Patent sealed.*

BROOMAN. 19th June 1860.

1487. RICHARD ARCHIBALD BROOMAN, of 166, Fleet Street, in the City of London, Patent Agent, for an invention for—"Improvements in locks."—*A communication to him from abroad by Auguste Theodore Baudrit, of Paris.*
Provisional protection only.

WELCH. 19th June 1860.

1488. JOSEPH JAMES WELCH, of the firm of Welch and Margetson, of Cheapside, in the City of London, for an invention for—"Improvements in neck-ties, scarfs, and cravats." *Provisional protection only.*

KENDALL. GENT. 20th June 1860.

1489. WILLIAM KENDALL, and GEORGE GENT, of Salford, near Manchester, in the County of Lancaster, Machinists, for an invention for—"Improvements in machinery or apparatus for making gas burners." *Letters Patent sealed.*

VERWEY. 20th June 1860.

1490. ANTON VERWEY, of No. 24, Saint Augustine Road, Camden Town, in the County of Middlesex, Merchant, for an invention for—"Improvements in the proportions of ingredients and mode of manufacture of a chemical compound for softening water." *Provisional protection only.*

SLEIGH. 20th June 1860.

1491. WILLIAM WILLCOCKS SLEIGH, of 49, Myddleton Square, in the County of Middlesex, M.D., for an invention for—"The neutralific motive-power engine."
Letters Patent sealed.

HINTON. 20th June 1860.

1492. GEORGE HINTON, of Birmingham, in the County of Warwick, Furnace Manager, for an invention for—"Improvements in cupola furnaces."
Letters Patent sealed.

ARTHUR. 20th June 1860.

1493. ALFRED ARTHUR, of the Polygon, Southampton, in the County of Southampton, Civil Engineer, for an invention for—"Obtaining and applying motive-power." *Provisional protection only.*

WIMBALL. 20th June 1860.

1494. HENRY WIMBALL, of Aldermaston, in the County of Berks, Brick Manufacturer, for an invention for—"Improvements in machinery or apparatus for making bricks, tiles and drain pipes." *Letters Patent sealed.*

HART.
20th June 1860.

1495. HENRY HART, of Cambridge Villas, South Street, Greenwich, in the County of Kent, Gentleman, for an invention for—"Improvements in machinery or apparatus for cutting and shaping metals and other substances."
Provisional protection only.

WEBB.
20th June 1860.

1496. EDWARD BRAINERD WEBB, of 34, Great George Street, Westminster, Civil Engineer, for an invention for—Improvements in breakwaters and piers."
Letters Patent sealed.

HIRON.
FELL.
20th June 1860.

1497. HENRY FRANKLIN HIRON, of Chipping Campden, Gloucestershire, and RICHARD FELL, of No. 16, Albion Place, Walworth, Surrey, Civil and Mechanical Engineers, for an invention for—"An improved vertical paddle wheel."
Letters Patent sealed.

SIMONS.
20th June 1860.

1498. FRANCIS CONSTABLE SIMONS, late Captain in the Bengal Artillery, for an invention for—"Improvements in ordnance." *Provisional protection only.*

BODMER.
20th June 1860.

1499. RUDOLPH BODMER, of 2, Thavies Inn, Holborn, in the City of London, for an invention for—"Improvements in machinery for washing textile fabrics."—*A communication to him from abroad by Charles Brown, of Winterthur, and F. Witz, of Frauenfeld, both in the Republic of Switzerland.* *Letters Patent sealed.*

PRESTON.
20th June 1860.

1500. FRANCIS PRESTON, of the City of Manchester, Engineer, for an invention for—"Certain improvements in machinery for shaping and cutting files and rasps."
Letters Patent sealed.

CORROYER.
BARTON.
20th June 1860.

1501. ADOLPHE CORROYER, of Orchard Street, Bloomsgrove, in the Parish of Radford, in the County of Nottingham, Engineer, and MOSES BARTON, of the Town and County of the Town of Nottingham, Engineer, for an invention for—"A new or improved washing machine, with the machinery or apparatus employed therein."
Provisional protection only.

TELFER.
21st June 1860.

1502. JOHN TELFER, of 2, Argyle Place, Newcastle-upon-Tyne, for an invention for—"Improvements in capstans and winches for hoisting, which improvements are also applicable to the steering of ships." *Provisional protection only.*

SMITH.
21st June 1860.

1503. JOHN SMITH, of Birmingham, in the County of Warwick, Manufacturer, for an invention for—"Improvements in the manufacture of composition jewellery and ornaments, and in cases for jewellery, photographs, and for other similar purposes." *Complete specification; Letters Patent sealed.*

MUNN.
21st June 1860.

1504. WILLIAM AUGUSTUS MUNN, of Throwley House, near Faversham, in the County of Kent, late a Major in the East Kent Regiment of Militia, for an invention for—"An improved cartridge pouch." *Letters Patent sealed.*

LEE.
WELSH.
21st June 1860.

1505. DENNIS LEE, and ANTHONY WELSH, of Leeds, in the County of York, Sculptors and Marble Masons, for an invention for—"Improvements in means or machinery for preparing and polishing marble." *Letters Patent sealed.*

WALKER.
21st June 1860.

1506. THOMAS WALKER, of Birmingham, in the County of Warwick, Engineer, for an invention for—"Improvements in means or apparatus for indicating the height of water in steam-boilers." *Letters Patent sealed.*

BAKER.
21st June 1860.

1507. WILLIAM BAKER, of Sheffield, in the County of York, Chemist, for an invention for—"Improvements in the process of softening and purifying lead."
Letters Patent sealed.

EASTMAN.
21st June 1860.

1508. WILLIAM PITT EASTMAN, of Newark, New Jersey, U. S. America, and temporary of 4, South Street, Finsbury, London, Manufacturer, for an invention for—"Improvements in bolts for fastening doors, gates and windows."—*A communication to him from abroad by Henry Burt, of Newark, New Jersey, U. S. America.*
Letters Patent sealed.

READE.
21st June 1860.

1509. WILLIAM READE, of Hibernia Chambers, Southwark, in the County of Surrey, Merchant, for an invention for—"Improvements in apparatus for singeing and preparing the skins of pigs previous to cureing." *Provisional protection only.*

CLARK.
21st June 1860.

1510. WILLIAM CLARK, of 53, Chancery Lane, in the County of Middlesex, Engineer and Patent Agent, for an invention for—"Improvements in machinery or apparatus for the manufacture of envelopes."—*A communication to him from abroad by Mr. Laurent Poirier, of Paris, Engineer.* *Letters Patent sealed.*

STEVENSON. 21st June 1860.

1511. HENRY BUENAVENTURA STEVENSON, of Alfred Street, Bedford Square, in the County of Middlesex, Gentleman, for an invention for—"Improvements in apparatus for propelling, and in other rotary apparatuses."
Provisional protection only.

CLARK. PRICE. 21st June 1860.

1512. ARTHUR TURNER CLARK, and JOHN PRICE, of 84, High Street, Southampton, in the County of Southampton, for an invention for—"Improvements in signal lanterns." *Letters Patent sealed.*

BUCKWELL. 21st June 1860.

1513. WILLIAM BUCKWELL, of Phœnix Stone Works, East Greenwich, in the County of Kent, Engineer, for an invention for—"Improvements in moulding blocks, slabs, pipes and other articles, and in the apparatus to be employed therein."
Provisional protection only.

JUTTEAU. 22nd June 1860.

1514. AIGNAN JUTTEAU, of the City of Orleans, in the Department of the Loiret, Empire of France, Architect, for an invention for—"A new system of plating and plastering houses and public buildings with natural stones." *Letters Patent sealed.*

MORRIS. MAPPLE. 22nd June 1860.

1515. WILLIAM MORRIS, of 89, Minories, in the City of London, Watch Maker, and HENRY MAPPLE, of Childs Hill, Hampstead, in the County of Middlesex, Electric Engineer, for an invention for—"Improvements in apparatus for electric clocks and telegraphs." *Provisional protection only.*

PALMER. SWIFT. 22nd June 1860.

1516. HENRY PALMER, of No. 8, Wakefield Terrace, Caledonia Road, Islington, in the County of Middlesex, and HENRY SPINK SWIFT, of Langbourn Chambers, Fenchurch Street, in the City of London, for an invention for—"Improvements in the method of and apparatus for propelling ships, vessels, boats or other craft in, on or through the water." *Letters Patent sealed.*

HOWELLS. 22nd June 1860.

1517. WILLIAM HOWELLS, of St. Catherine Street, Carmarthen, South Wales, for an invention for—"A portable window platform." *Letters Patent sealed.*

SIMPSON. 22nd June 1860.

1518. GEORGE SIMPSON, of Calm Cottage, Hoole Street, Whitehouse Lane, Sheffield, in the County of York, for an invention for—"Improvements in wine decanters and waggon or travelling decanter stand." *Provisional protection only.*

GEDGE. 22nd June 1860.

1519. WILLIAM EDWARD GEDGE, of the firm of John Gedge and Son, No. 11, Wellington Street, Strand, London, Patent Agent, for an invention for—"Improvements in saddlery and harness."—*A communication to him from abroad by Auguste Duchène, of Vouziers, Ardennes, in the Empire of France, Printer.*
Provisional protection only.

GEDGE. 22nd June 1860.

1520. WILLIAM EDWARD GEDGE, of the firm of John Gedge and Son, of No. 11, Wellington Street, Strand, London, Patent Agent, for an invention for—"Improvements in blinds called venetian or jalousies."—*A communication to him from abroad by Victor Bellut, of Puy en Velay, Haute Loire, France, Architect.*
Provisional protection only.

MACFARLANE. 22nd June 1860.

1521. WALTER MACFARLANE, of Glasgow, in the County of Lanark, North Britain, Engineer, for an invention for—"Improvements in water closets and sewerage and sanatory apparatus or appliances." *Letters Patent sealed.*

WILSON. 22nd June 1860.

1522. JOHN WILSON, of Glasgow, in the County of Lanark, North Britain, Manufacturing Chemist, for an invention for—"Improvements in the manufacture or production of sulphur or brimstone, sulphurous acid, and sulphuric acid."
Provisional protection only.

GRATTAN. 22nd June 1860.

1523. NICHOLAS GRATTAN, of 24, South Mall, Cork, Ireland, for an invention for—"Improvements in gilding steel and other metals." *Provisional protection only.*

NEWTON. 22nd June 1860.

1524. WILLIAM EDWARD NEWTON, of the Office for Patents, 66, Chancery Lane, in the County of Middlesex, Civil Engineer, for an invention for—"Improvements in lithographic printing presses."—*A communication to him from abroad by Jean Baptiste Huguet, of Paris, in the Empire of France.* *Provisional protection only.*

DEWICK. 22nd June 1860.

1525. JOHN DEWICK, of New Lenton, in the County of Nottingham, Lace Maker, for an invention for—"Improvements in bobbin net or twist lace machinery." *Letters Patent sealed.*

BROOMAN. 22nd June 1860.

1526. RICHARD ARCHIBALD BROOMAN, of 166, Fleet Street, in the City of London, Patent Agent, for an invention for—"Improvements in horse-rakes."—*A communication to him from abroad by Gustave Hamoir, of Saultain, France.*
Letters Patent sealed.

RAMSBOTTOM. 23rd June 1860.

1527. JOHN RAMSBOTTOM, of Crewe, in the County of Chester, Engineer, for an invention for—"Improvements in supplying the tenders or tanks of locomotive engines with water." *Letters Patent sealed.*

DAWSON. 23rd June 1860.

1528. DAVID DAWSON, of Milnes Bridge, near Huddersfield, in the West Riding of the County of York, Dyer, for an invention for—"Improvements in the dyeing of cotton wool (or waste) black and brown." *Letters Patent sealed; no specification filed.*

JOYCE. MORLEY. 23rd June 1860.

1529. JAMES JOYCE, Wholesale Clothes Manufacturer, of Birmingham, in the County of Warwick, and of Hinckley, in the County of Leicester, and ABRAHAM MORLEY, Gentleman, also of Hinckley, aforesaid, for an invention for—"A new machine or improved mechanical arrangements or combinations for the manufacture of stockings, vests, and other articles of hosiery." *Letters Patent sealed.*

WARD. 23rd June 1860.

1530. JAMES WARD, of Queen's Street, Pimlico, in the County of Middlesex, for an invention for—"Improvements in water closets." *Provisional protection only.*

JOBSON. 23rd June 1860.

1531. ROBERT JOBSON, of Dudley, in the County of Worcester, Engineer, for an invention for—"Improvements in moulding articles of earthenware or porcelain." *Provisional protection only.*

JONES. 23rd June 1860.

1532. HENRY JONES, of the North Devon Pottery Company, Annery, near Bideford, for an invention for—"Improvements in waterclosets." *Letters Patent sealed.*

BOYD. 23rd June 1860.

1533. ROBERT ANDREW BOYD, of Southwark, in the County of Surrey, Merchant, for an invention for—"Improvements in singeing or burning the hair off pigs." *Provisional protection only.*

LANE. 23rd June 1860.

1534. JOSEPH LANE, of Cranbrook Street, Old Ford, in the County of Middlesex, Engineer, for an invention for—"Improvements in apparatus for grinding edge and other cutting tools." *Provisional protection only.*

DINSMORE. 23rd June 1860.

1535. DAVID CROSMAN DINSMORE, of Boston, in the United States of America, for an invention for—"An improved churn."—*A communication to him from abroad by Rufus Lapham, and Riley P. Wilson, resident at New York, in the United States of America.* *Provisional protection only.*

PAILLERON. 23rd June 1860.

1536. PIERRE PAILLERON, of Chandon, Loire, France, Cultivator, for an invention for—"An improved apparatus for distilling." *Letters Patent sealed.*

GATWOOD. 23rd June 1860.

1537. EDWARD GATWOOD, of Holmer, near Hereford, in the County of Hereford, Carriage Builder and Engineer, for an invention for—"Improvements in making wheels applicable to railway carriages and locomotive engines." *Provisional protection only.*

BARNSLEY. 25th June 1860.

1538. ABRAHAM BARNSLEY, of New Town, in the Parish of Rowley Regis, in the County of Stafford, Iron Tube Manufacturer, for an invention for—"Improvements in apparatus for the manufacture of welded iron tubes." *Letters Patent sealed; no specification filed.*

DINSMORE. 25th June 1860.

1539. DAVID CROSMAN DINSMORE, of Boston, in the United States of America, for an invention for—"Improvements in machinery for splitting leather and cutting the heels of boots and shoes." *Letters Patent sealed.*

JOHNSON. 25th June 1860.

1540. JOHN HENRY JOHNSON, of 47, Lincoln's Inn Fields, in the County of Middlesex, and of 166, Buchanan Street, in the City of Glasgow, North Britain, Gentleman, for an invention for—"Improvements in hydraulic apparatus for obtaining motive-power and for raising water."—*A communication to him from abroad by Louis Coignard, of Paris, in the Empire of France.* *Letters Patent sealed.*

CREASER. 25th June 1860.

1541. HENRY CREASER, of the City of York, Builder, for an invention for—"Improments in reaping and mowing machines." *Letters Patent sealed.*

DAVIES. 25th June 1860.

1542. GEORGE DAVIES, of No. 1, Serle Street, Lincoln's Inn, in the County of Middlesex, and No. 28, St. Enoch Square, in the City of Glasgow, Civil Engineer and Patent Agent, for an invention for—"Improvements in the needles used in machinery for manufacturing ribbed stocking fabric."—*A communication to him from abroad by Hilaire Adrien Quinquarlet, of Paris, France.* *Letters Patent sealed.*

ROUTLEDGE. 25th June 1860.

1543. WILLIAM ROUTLEDGE, of Salford, near Manchester, in the County of Lancaster, Engineer, for an invention for—"Improvements in self-acting feed apparatus for steam-boilers." *Letters Patent sealed.*

HIGGINBOTTOM. 25th June 1860.

1544. WILLIAM HIGGINBOTTOM, of Whittington, in the County of Derby, Contractor, for an invention for—"Improvements in pipe joints and valves for gas or water mains and sanatory purposes generally." *Provisional protection only.*

TRUMAN. 25th June 1860.

1545. EDWIN THOMAS TRUMAN, of Old Burlington Street, in the County of Middlesex, Surgeon, for an invention for—"Improvements in horse shoes." *Provisional protection only.*

HOOPER. 25th June 1860.

1546. WILLIAM HOOPER, of Mitcham, in the County of Surrey, India-rubber Manufacturer, for an invention for—"Improvements in reworking compounds of india-rubber and sulphur, and in insulating telegraphic wires or conductors." *Letters Patent sealed.*

READE. 25th June 1860.

1547. WILLIAM READE, of Hibernia Chambers, Southwark, in the County of Surrey, Merchant, for an invention for—"Improvements in apparatus for carbonizing or partially charring the skins of pigs previous to cureing." *Provisional protection only.*

FIRMIN. 26th June 1860.

1548. GEORGE JORDAN FIRMIN, of the Atlas Chemical Works, Borough Road, Southwark, for an invention for—"Improvements in furnaces and fire-places." *Letters Patent sealed; no specification filed.*

CARTWRIGHT. 26th June 1860.

1549. MATTHEW CARTWRIGHT, of No. 7, Crescent, in the City of Carlisle, in the County of Cumberland, Dentist, for an invention for—"Improvements in the manufacture of mouth-pieces for dental and other purposes." *Letters Patent sealed.*

HUDSON. EVANS. 26th June 1860.

1550. WILLIAM HENRY HUDSON, of Widemarsh Street, Hereford, and JOHN EVANS, of Lugwardine, both in the County of Hereford, Clockmakers, for an invention for—"Improvements in locks." *Provisional protection only.*

SHAW. POPE. 26th June 1860.

1551. JOHN SHAW (Ironmonger), of Burslem, and JOSEPH TUNNICLIFF POPE, of Burslem, (Potter), in the County of Stafford, for an invention for—"Improvements in the articles technically known as 'flys' or 'flyers' used in the process of spinning and preparing woollen, worsted, cotton and other fibrous materials. *Provisional protection only.*

BARNSLEY. 26th June 1860.

1552. JABEZ ELUL BARNSLEY, of Rowley Regis, in the County of Stafford, Manufacturer, for an invention for—"Improvements in the manufacture of welded iron tubes and in machinery employed in the said manufacture." *Provisional protection only.*

CARTWRIGHT. 26th June 1860.

1553. HENRY CARTWRIGHT, of the Dean, Broseley, in the County of Salop, Gentlemen, for an invention for—"Improvements in means or apparatus in connection with steam-engines to facilitate the working of the same expansively." *Letters Patent sealed.*

FLETCHER. 26th June 1860.

1554. JOHN FLETCHER, of Farnham Place, Southwark, in the County of Surrey, Engineer, for an invention for—"Improvements in the apparatus for treating saccharine and saline solutions." *Letters Patent sealed.*

PEPPÉ. 26th June 1860.

1555. GEORGE TOSCO PEPPÉ, of Sydenham, in the County of Kent, for an invention for—"Improvements in apparatus for keeping time for weighing letters and other matters, and for levelling." *Letters Patent sealed.*

NEWTON. 26th June 1860.

1556. WILLIAM EDWARD NEWTON, of the Office for Patents, 66, Chancery Lane, in the County of Middlesex, Civil Engineer, for an invention for—"Improved machinery for the manufacture of lace or bobbin net."—*A communication to him from abroad by Messrs. L'heureux, Brothers, of St. Pierre les Calais, in the Empire of France.* *Letters Patent sealed.*

MACNAB. 27th June 1860.

1557. WILLIAM MACNAB, of Greenock, in the County of Renfrew, North Britain, Engineer, for an invention for—"Improvements in and connected with marine and other steam-engines." *Letters Patent sealed.*

FORMBY. 27th June 1860.

1558. ROBERT FORMBY, of Liverpool, in the County of Lancaster, Ship-Owner, for an invention for—"Improved apparatus for applying water power to the working of ships' pumps and winches, and to other useful purposes." *Letters Patent sealed.*

LATTA. 27th June 1860.

1559. MARGARET JARRETT LAURIE LATTA, of Ashton Gourock, in the County of Renfrew, North Britain, for an invention for—"Improvements in the treatment of various substances for the purpose of rendering the same noninflammable." *Letters Patent sealed.*

MACINTOSH. 27th June 1860.

1560. JOHN MACINTOSH, of North Bank, Regent's Park, in the County of Middlesex, for an invention for—"Improved compounds for coating or insulating submarine or other telegraphic wires, also in rendering the gutta-percha or india-rubber coatings of telegraphic wires impervious." *Letters Patent sealed.*

EVANS. 27th June 1860.

1561. JOHN CAMPBELL EVANS, of the Morden Iron Works, East Greenwich, in the County of Kent, Engineer, for an invention for—"Improvements in machinery or apparatus for rolling or drawing metals and other substances, partly applicable to the covering of electric telegraph cables, and to the manufacture of wire and other ropes." *Letters Patent sealed.*

FLETCHER. 28th June 1860.

1562. WILLIAM HENRY FLETCHER, of Denmark Court, Golden Lane, City of London, Shirt-dresser, for an invention for—"Improvements in the form and arrangement of stoves for heating irons used for dressing and polishing shirts, collars and similar articles, and also in the figure or form of the said irons." *Letters Patent sealed.*

BINKS. 28th June 1860.

1563. CHRISTOPHER BINKS, of Parliament Street, Westminister, in the County of Middlesex, for an invention for—"Improvements in manufacturing oxygen gas." *Provisional protection only.*

BINKS. 28th June 1860.

1564. CHRISTOPHER BINKS, of Parliament Street, Westminister, in the County of Middlesex, for an invention for—"Improvements in manufacturing chlorine." *Provisional protection only.*

PIDDING. 28th June 1860.

1565. WILLIAM PIDDING, of the Borough Road, Southwark, in the County of Surrey, Gentleman, for an invention for—"Improvements in fire lighters, their form or shape, and the machinery or apparatus used in their manufacture." *Provisional protection only.*

BLAKELEY. BLAKELEY. 28th June 1860.

1566. JAMES BLAKELEY, and WILLIAM HENRY BLAKELEY, of Netherton, near Huddersfield, in the County of York, Joiners and Cabinet Makers, for an invention for—"Improvements in machinery or apparatus for sawing or cutting wood, bone, ivory, stone, or other vegetable, animal, or mineral substances." *Letters Patent sealed.*

BOSSELAERS. 28th June 1860.

1567. CHARLES BOSSELAERS, of 74, Mark Lane, in the City of London, Merchant, for an invention for—"An approved apparatus for corking bottles, jars and other vessels."—*A communication to him from abroad by Francois Vander-Hagen, of Brussels, in the Kingdom of Belgium.* *Letters Patent sealed.*

ALLEN. GLASSON. 28th June 1860.

1568. JACOB ALLEN, of Travalga Wharf, Ratcliff Cross Stairs, in the County of Middlesex, and JOSIAH GLASSON, of Fore Street, Limehouse, in the County of Middlesex, for an invention for—"An improved method of connecting together the several tubes used in connection with steam-boilers for superheating steam." *Provisional protection only.*

CAMPION. CAMPION. 28th June 1860.

1569. WILLIAM CAMPION, and WILLIAM CAMPION, both of the Town and County of the Town of Nottingham, Machine Builders, for an invention for—"Improvements in sewing-machines." *Letters Patent sealed; no specification filed.*

RICHARDS. 28th June 1860.

1570. WESTLEY RICHARDS, of Birmingham, in the County of Warwick, Manufacturer, for an invention for—"Improvements in ordnance, also in cartridges and cap holders." *Letters Patent sealed.*

CLARK. 28th June 1860.

1571. WILLIAM CLARK, of 53, Chancery Lane, in the County of Middlesex, Engineer and Patent Agent, for an invention for—"Improvements in machinery for cutting files."—*A communication to him from abroad by James Cooper Cooke, of Middletown, Middlesex County, Connecticut, U. S. A., Machinist.* *Letters Patent sealed.*

SALE. 29th June 1860.

1572. JOHN SALE, of Chesterton, in the County of Stafford, Brick and Tile Manufacturer, for an invention for—"Improvements in tke construction of ovens and of chambers in ovens for firing bricks, tiles, pipes, quarries, and other articles of the like nature." *Letters Patent sealed.*

WHITEHOUSE. 29th June 1860.

1573. JOHN WHITEHOUSE, of Birmingham, in the County of Warwick, Manufacturer, for an invention for—"An improvement in the manufacture of metallic door and other knobs, and a new or improved method of connecting door and other knobs with their spindles." *Letters Patent sealed.*

WILSON. 29th June 1860.

1574. THOMAS WILSON, of Birmingham, in the County of Warwick, Engineer, for an invention for—"Improvements in breech loading fire-arms and ordnance, and in cartridges." *Letters Patent sealed.*

TAYLOR. 29th June 1860.

1575. JAMES TAYLOR, of Birkenhead, Engineer, for an invention for—"Improvements in locomotive engines and wheel carriages." *Letters Patent sealed.*

SOUTTER. 29th June 1860.

1576. JAMES SOUTTER, of Hoxton, in the County of Middlesex, Engineer, for an invention for—"Improvements in steam-boilers, and an improved arrangement of steam-engine to be used therewith." *Letters Patent sealed.*

VOUILLON. 29th June 1860.

1577. FRANÇOIS VOUILLON, of Louviers (Eure), in the French Empire, Manufacturer, for an invention for—"Improvements in drawing, twisting and felting filamentous, fibrous, or textile materials." *Provisional protection only.*

HALE. 29th June 1860.

1578. WILLIAM HALE, of 6, John Street, Adelphi, in the County of Middlesex, Civil Engineer, for an invention for—"Improvements in impelling shells or shots and in apparatus for directing their flight from ships or vessels, which apparatus is applicable to guns or mortars used on board ship for preventing them being acted upon by the pitching or rolling of the ship or vessel." *Letters Patent sealed.*

MORGAN. 29th June 1860.

1579. GEORGE CHEESMAN MORGAN, of New Castle, Pennsylvania, in the United States of America, and of 53, Chancery Lane, in the County of Middlesex, Gentleman, for an invention for—"Improvements in looms."—*A communication to him from abroad by Mr. Joseph Clifton, of New-Castle, aforesaid.*
Letters Patent sealed.

MORGAN. 29th June 1860.

1580. GEORGE CHEESMAN MORGAN, of New-Castle, Pennsylvania, in the United States of America, and of 53, Chancery Lane, in the County of Middlesex, Gentleman, for an invention for—"Improvements in the manufacture of driving belts and straps."—*A communication to him from abroad by Mr. Joseph Clifton, of New-Castle, aforesaid.* *Letters Patent sealed.*

REBOUR. 30th June 1860.

1581. CLAUDE JOSEPH NAPOLÉON REBOUR, of Paris, in the Empire of France, Engineer, for an invention for—"A new motive-power, so called Rebour's motor."
Complete specification; Letters Patent sealed.

GEDGE. 30th June 1860.

1582. WILLIAM EDWARD GEDGE, of the firm of John Gedge and Son, No. 11, Wellington Street, Strand, in the County of Middlesex, Patent Agent, for an invention for—"Improved bricks and tiles."—*A communication to him from abroad by Cizi Paul Coutanceau, of Toulouse, in the Empire of France, Tile Maker.*
Provisional protection only.

HAWKSEY. 30th June 1860.

1583. ANDREW HAWKSEY, of Saint Helen's, in the County of Lancaster, Upholsterer, for an invention for—"An improved method of drawing and withdrawing window curtains and other similar hangings." *Letters Patent sealed.*

COX. HARRINGTON. HOLLAND. 30th June 1860.

1584. THOMAS COX, the younger, of Birmingham, in the County of Warwick, Manufacturer, and ROBERT HARRINGTON, of Birmingham, aforesaid, Machinist, and WILLIAM HOLLAND, of King's Norton, in the County of Worcester, Tool Maker, for an invention for—"Improvements in the manufacture of runner notches and top notches for umbrellas and parasols." *Letters Patent sealed.*

COHADE. 30th June 1860.

1585. HENRY FRANCOIS COHADE, of Gravelle, Saint Maurice, near Charenton (Seine), France, for an invention for—"Improvements in obtaining motive-power."
Letters Patent sealed.

LAMING. SMITH. 30th June 1860.

1586. RICHARD LAMING, of Clifton Villas, Maida Hill West, Middlesex, and CHARLES SMITH, of 8, Gloucester Street, Regent's Park, Middlesex, for an invention for—"Improvements in purifying certain gases and liquids from sulphuretted hydrogen." *Letters Patent sealed.*

NEWHOUSE. 2nd July 1860.

1587. JAMES NEWHOUSE, of Farnworth, near Bolton-le-Moors, in the County of Lancaster, Manager, for an invention for—"Certain improvements in machinery for spinning and doubling cotton and other fibrous materials." *Letters Patent sealed.*

GONTARD. 2nd July 1860.

1588. CÉLESTIN PHILIPPE GONTARD, of No. 60, Boulevart de Strasbourg, Paris, in the Empire of France, Watchmaker, for an invention for—"Improvements in remontoirs for winding up and setting right watches without keys."
Letters Patent sealed.

MOULIN. 2nd July 1860.

1589. LOUIS FREDERIC MOULIN, of No. 4, Rue du Houblon, Brussels, Belgium, Builder, for an invention for—"An improved system of water-guage for steam-boilers." *Provisional protection only.*

HUGHES. 2nd July 1860.

1590. EDWARD THOMAS HUGHES, of the firm of Hughes & Son, Patent Agents, 123, Chancery Lane, London, for an invention for—"Obtaining coloring matter from the lentise or mastic tree."—*A communication to him from abroad by Christophe Muratore, Merchant of Algiers, Africa, Empire of France.*" *Provisional protection only.*

NICHOLSON. 2nd July 1860.

1591. EDWARD CHAMBERS NICHOLSON, of the firm of Simpson, Maule and Nicholson, of Kennington Road, in the County of Surrey, Manufacturing Chemists, for an invention for—"Improvements in the manufacture of a peroxide of lead having peculiar oxidizing properties." *Provisional protection only.*

CHETWYN. 2nd July 1860.

1592. EPHRAIM CHETWYN, of the firm of Groves & Chetwyn, of Worcester, in the County of Worcester, Glove Maker, for an invention for—"Improvements in the manufacture of gloves." *Complete specification; Letters Patent sealed.*

BISHOP. 2nd July 1860.

1593. HORBERT HENRY BISHOP, of Bristol, in the State of Connecticut, United States of America, for an invention for—"Improvements in sewing-machines." *Letters Patent sealed.*

SALMON. 2nd July 1860.

1594. JOHN AITKEN SALMON, of Glasgow, in the County of Lanark, Engineer, for an invention for—"Improvements in apparatus for feeding boilers, and in furnaces." *Letters Patent sealed.*

GEDGE. 2nd July 1860.

1595. WILLIAM EDWARD GEDGE, of the firm of John Gedge and Son, No. 11, Wellington Street, Strand, in the County of Middlesex, Patent Agent, for an invention for—"Improvements in chairs and other articles of furniture to be used principally at sea."—*A communication to him from abroad by Victor Gille Marie Joseph Neveu-Derotrée, of l'Ile Dieu, Vendée, in the Empire of France, Doctor of Medicine, and Arsène Charrier, of Noirmoutiers, Vendée, Contractor for Public Works.* *Letters Patent sealed.*

BROOMAN. 2nd July 1860.

1596. RICHARD ARCHIBALD BROOMAN, of 166, Fleet Street, in the City of London, Patent Agent, for an invention for—"Improvements in the manufacture of hats."—*A communication to him from abroad by Auguste Durand, of Paris.* *Provisional protection only.*

BROOMAN. 2nd July 1860.

1597. RICHARD ARCHIBALD BROOMAN, of 166, Fleet Street, in the City of London, Patent Agent, for an invention for—"Improvements in harrows."—*A communication to him from abroad by J. C. C. Meyn, of Hamburg.* *Letters Patent sealed.*

STEVENS. 3rd July 1860.

1598. CHARLES STEVENS, Manager of the British and Foreign Office for Patents, 1B, Welbeck Street, Cavendish Square, London, in the County of Middlesex, for an invention for—"An improved navigable balloon or aërostatic ship."—*A communication to him from abroad by C. F. Rablat, of Paris, in the Empire of France.* *Complete specification; Letters Patent sealed.*

STANDLY. 3rd July 1860.

1599. HENRY JOHN STANDLY, of 9, Pall Mall East, in the City of Westminster, in the County of Middlesex, Gentleman, for an invention for—"Improvements in retorts, crucibles and other vessels employed for the purposes of fusion and distillation." *Provisional protection only.*

DUMONT. 3rd July 1860.

1600. CHARLES JOSEPH EUGÈNE DUMONT, of Liège, in Belgium, for an invention for—"Improvements in machinery or apparatus for separating minerals and substances of different specific gravities." *Letters Patent sealed.*

HAUGHTON. 3rd July 1860.

1601. JAMES HAUGHTON, of Gomersal, in the County of York, Machine Maker, for an invention for—"Improvements in machinery or apparatus for slubbing and spinning wool or other fibrous substances." *Letters Patent sealed.*

JOHNSON. 3rd July 1860.

1602. JOHN JOHNSON, of Ashton-under-Lyne, in the County of Lancaster, Jacquard Harness Builder, for an invention for—"Certain improvements in jacquard machines." *Letters Patent sealed.*

REID. 3rd July 1860.

1603. ROBERT NICOL REID, of University Street, in the County of Middlesex, Engineer, for an invention for—"Improvements in insulators for electric telegraph purposes." *Letters Patent sealed.*

LANE.
3rd July 1860.

1604. JOSEPH LANE, of Cranbrook Street, Old Ford, in the County of Middlesex, Engineer, for an invention for—"Improvements in screw cutting lathes."
Provisional protection only.

BROOMAN.
3rd July 1860.

1605. RICHARD ARCHIBALD BROOMAN, of 166, Fleet Street, in the City of London, Patent Agent, for an invention for—"An improved fabric suitable for holding charges of gunpowder."—*A communication to him from abroad by Heinrich Joachim Natorp, of Hamburg.* *Provisional protection only.*

WEBER.
3rd July 1860.

1606. LIONEL EDWARD WEBER, of the Hotel de Bellevue, Brussels, Gentleman, for an invention for—"Improvements in pipes and cigar holders."
Provisional protection only.

BROADHURST.
3rd July 1860.

1607. JOHN BUTLER BROADHURST, of Compstall, near Stockport, in the County of Chester, Engineer, for an invention for—"Improvements in heating water for steam-boilers." *Provisional protection only.*

RICHARDSON.
3rd July 1860.

1608. THOMAS RICHARDSON, of Newcastle-on-Tyne, for an invention for—"Improvements in purifying coal gas." *Letters Patent sealed.*

MORRIS.
3d July 1860.

1609. JAMES MORRIS, of No. 8, Albert Square, Clapham Road, in the County of Surry, for an invention for—"An improved key for securing railway rails."
Letters Patent sealed.

BRAYNARD.
3rd July 1860.

1610. THOMAS L. BRAYNARD, of the City and State of New York, United States of America, for an invention for—"Improvements in apparatus for working, training and levelling cannon on board of vessels & in fortifications, redoubts and other places."—*A communication from John J. Walsh, a person resident in the City and State of New York, U. States.* *Letters Patent sealed.*

DURAND.
3rd July 1860.

1611. FRANÇOIS DURAND, of Paris, in the French Empire, Engineer, for an invention for—"An improved means of driving spindles used in spinning machinery, applicable also to the communicating of rotary motion for other purposes."
Provisional protection only.

DURAND.
3rd July 1860.

1612. FRANÇOIS DURAND, of Paris, in the French Empire, Engineer, for an invention for—"An improved mode of purifying the Thames and other tidal rivers."
Provisional protection only.

SKINNER.
4th July 1860.

1613. WILLIAM SKINNER, of Williamsburgh, Massachusetts, in the United States of America, for an invention for—"A new and improved machine for stretching and glossing silk."—*A communication to him from abroad by Lucius Dimock, of Hebron, Connecticut, United States of America.* *Letters Patent sealed.*

HARRIS.
4th July 1860.

1614. GEORGE STEPHENS HARRIS, of No. 10, Oxford Street, in the County of Middlesex, Wine Merchant, for an invention for—"Improvements in apparatus for rapidly cooling or refrigerating water, wine, beer, or other liquids."
Provisional protection only.

PERKES.
4th July 1860.

1615. SAMUEL PERKES, of Clapham, in the County of Surrey, Civil Engineer, for an invention for—"Improvements in presses and modes of pressing applicable to cotton, hemp, wool, coir, hides, hay, fibres, peat, linen thread, piece goods, extracting oil, and other useful purposes." *Provisional protection only.*

NEWBON.
SMITH.
4th July 1860.

1616. JAMES THOMAS PETER NEWBON, and THOMAS SMITH, Naval Architects, both of Fenchurch Street, in the City of London, for an invention for—"Improvements in apparatus or machinery and gearing for working, stopping and holding chains in ships or vessels, and for moving or retaining heavy weights."
Complete specification; Letters Patent sealed.

STANDLY.
4th July 1860.

1617. HENRY JOHN STANDLY, of 9, Pall Mall East, in the City of Westminster, in the County of Middlesex, Gentleman, for an invention for—"Improvements in the production of gases for illumination and other purposes."
Provisional protection only.

SHIPLEY.
TAYLOR.
SHUTTLEWOOD.
4th July 1860.

1618. JOHN SHIPLEY, of Elton Street, Leicester, JAMES TAYLOR, of Asylum Street, Leicester, and JOSEPH SHUTTLEWOOD, of Thorpe Street, Leicester, for an invention for—"Improvements in knitting-machinery."
Letters Patent sealed; no specification filed.

HAYWOOD. CLARIDGE. 4th July 1860.

1619. JAMES HAYWOOD, Junior, of the Phœnix Foundry, Derby, and THOMAS CLARIDGE, Engineer and Manager to James Haywood, Junior, of Derby, aforesaid, for an invention for—"An improved arrangement of combined thrashing and dressing machine." *Letters Patent sealed.*

SAVAGE. 4th July 1860.

1620. JOHN SAVAGE, of Pelham Street, in the Town and County of the Town of Nottingham, Chymist and Druggist, for an invention for—"An improved means of or apparatus for threading needles." *Letters Patent sealed*

DOULL. 4th July 1860.

1621. ALEXANDER DOULL, of Westminster, Civil Engineer, for an invention for—"Improvements in excavating or clearing away earth, sand and other substances prior to forming foundations under water and otherwise." *Letters Patent sealed*

BLAKE. 4th July 1860.

1622. JOHN BLAKE, of Sheffield, in the County of York, Steel and File Manufacturer, for an invention for—"Improvements in the manufacture of guns and fire-arms of steel." *Provisional protection only.*

WILLIAMS. 4th July 1860.

1623. CADOGAN WILLIAMS, of Newcastle, in the County of Glamorgan, Gentleman, for an invention for—"Improvements in means or apparatus for the protection of the coast of a country from invasion by ships or other vessels." *Provisional protection only.*

WALKER. 5th July 1860.

1624. THOMAS WALKER, of No. 2, Grove Cottages, Hill Street, Peckham, Surrey, for an invention for—"An improved collapse detector pocket for protecting articles worn on the person." *Provisional protection only.*

SQUIRE. 5th July 1860.

1625. WILLIAM STEVENS SQUIRE, of No. 37, Acacia Road, Saint John's Wood, in the County of Middlesex, Analytical Chemist, for an invention for—"Improvements in the production of colors for dyeing and printing." *Provisional protection only.*

KROTKOFF. 5th July 1860.

1626. SERGE KROTKOFF, No. 1B, Welbeck Street, Cavendish Square, in the County of Middlesex, for an invention for—"Improvements in apparatus for employing the electric light." *Provisional protection only.*

OGDEN. 5th July 1860.

1627. JOHN OGDEN, of Manchester, in the County of Lancaster, Manufacturer, for an invention for—"Certain improvements in power looms for weaving." *Letters Patent sealed.*

HOOD. 5th July 1860.

1628. WALTER HOOD, of Glasgow, in the County of Lanark, North Britain, Clothier, for an invention for—"Improvements in ladies' riding trowsers." *Letters Patent sealed.*

STANDLY. 5th July 1860.

1629. HENRY JOHN STANDLY, of 9, Pall Mall East, in the City of Westminster, in the County of Middlesex, Gentleman, for an invention for—"Improvements in the production of gases for illumination and other purposes." *Provisional protection only.*

NEWTON. 5th July 1860.

1630. ALFRED VINCENT NEWTON, of the Office for Patents, 66, Chancery Lane, in the County of Middlesex, Mechanical Draughtsman, for an invention for—"An improved construction of spring butt hinge."—*A communication to him from abroad by George Bowen Pierson, of New York City, United States of America.* *Provisional protection only.*

THOMAS. 5th July 1860.

1631. WILLIAM FREDERICK THOMAS, of Newgate Street, in the City of London, for an invention for—"Improvements in sewing-machines." *Letters Patent sealed.*

NOONE. 5th July 1860.

1632. JOSEPH NOONE, of Peterboro', in the County of Hillsboro', and State of New Hampshire, of the United States of America, for an invention for—"A new and useful improvement in the carding-machine."—*A communication to him by one Joseph Davis, residing at East Wilton, of the County and State aforesaid.* *Letters Patent sealed.*

LAMBERT. 6th July 1860.

1633. BENJAMIN LAMBERT, of 4, Warner Street, Dover Road, for an invention for—"Improvements in treating printed paper to remove the ink and to obtain pulp, and also in treating printers rags to remove the ink therefrom." *Letters Patent sealed.*

GRIMSHAW. 6th July 1860.

1634. WESTON GRIMSHAW, of Lower Broughton, near the City of Manchester, Gentleman, for an invention for—"Certain improvements in machinery for compressing brick earth and other materials." *Letters Patent sealed.*

DE MAEGT. 6th July 1860.

1635. JOSEPH DE MAEGT, Collector, of Saint Josse-ten-noode, near the City of Brussels, in the Kingdom of Belgium, for an invention for—"Improvements in the manufacture of paper." *Provisional protection only.*

MITCHELL. 6th July 1860.

1636. BENJAMIN MITCHELL, of Crowe Hall, Denver, in the County of Norfolk, for an invention for—"An improved machine applicable to harrowing, weeding, hoeing, and other agricultural purposes." *Letters Patent sealed.*

HUGHES. 6th July 1860.

1637. EDWARD THOMAS HUGHES, of the firm of Hughes and Son, Patent Agents, 123, Chancery Lane, London, for an invention for—"Improvements in machinery or apparatus for pressing and ironing applicable to clothing, bookbinding and other purposes."—*A communication to him from abroad by Auguste François Dusautoy, of* 14, *Boulevard des Italiens, Paris, in the Empire of France.* *Letters Patent sealed.*

BIEDERMANN. 6th July 1860.

1638. EMIL BIEDERMANN, of 14, Rockingham Row, New Kent Road, in the County of Surrey, Civil Engineer, for an invention for—"Improvements in apparatus for the measurement of gas and other fluids." *Provisional protection only.*

DOUBLET. 6th July 1860.

1639. THOMAS DOUBLET, of 7, City Road, Finsbury Square, in the City of London, for an invention for—"Improvements in rifles and other fire-arms." *Provisional protection only.*

LESLIE. 7th July 1860.

1640. JOHN LESLIE, of Conduit Street, Hanover Square, in the County of Middlesex, Esquire, for an invention for—"Improvements in the manufacture of gas." *Letters Patent sealed.*

BIRCUMSHAW. 7th July 1860.

1641. JONATHAN BIRCUMSHAW, of New Lenton, in the County of Nottingham, Lace Manufacturer, for an invention for—"Improvements in machinery for the manufacture of warp fabrics." *Letters Patent sealed.*

SNUGGS. SNUGGS. 7th July 1860.

1642. EVERITT AUSTIN SNUGGS, of the Borough of New Windsor, in the County of Berks, Ironmonger, and JOHN SNUGGS, of the same place, Plumber, for an invention for—"Improvements in the manufacture of tea kettles and fountains, coffee pots, cans, saucepans, stewpans, pails, and other articles of a similar character for domestic use, and baths, watering pots, and other articles of a similar description." *Provisional protection only.*

NEWMAN. 7th July 1860.

1643. JAMES NEWMAN, of Birmingham, in the County of Warwick, Manufacturer, for an invention for—"Improvements in the manufacture of hooks and other similar dress fastenings." *Letters Patent sealed.*

POLLIT. 9th July 1860.

1644. RICHARD POLLIT, of Bolton-le-Moors, in the County of Lancaster, Boiler Maker, for an invention for—"Certain improvements in the construction of steam-boilers." *Letters Patent sealed.*

TAYLOR. BUTLER. 9th July 1860.

1645. JOHN INGHAM TAYLOR, of the Cottage, Tucks Gardens, Sloane Street, in the County of Middlesex, Civil and Mechanical Engineer, and GEORGE BUTLER, of 3, Carlton Street, Kentish Town, in the County of Middlesex, Solicitor, for an invention for—"Improvements in apparatus for stamping, printing and embossing." *Letters Patent sealed.*

WARNECK. 9th July 1860.

1646. LÉOPOLD CHRISTIAN WARNECK, of No, 11, Place du Pilori, Nantes, in the Empire of France, Master Mariner, for an invention for—"An improved method of treating the coffee husk for purposes of nutrition." *Provisional protection only.*

TOWNSEND. WALKER. 9th July 1860.

1647. JOSEPH TOWNSEND, of Glasgow, in the County of Lanark, North Britain, Manufacturing Chemist, & JAMES WALKER, of the same place, Analytical Chemist, for an invention for—"Improvements in obtaining sulphur, sulphite and hyposulphite of lime, and oxide of manganese, from bye or waste chemical products." *Provisional protection only.*

DISSTON. 9th July 1860.

1648. HENRY DISSTON, of Laurel Street, Philadelphia, United States of America, Saw and Tool Manufacturer, for an invention for—"Improvements in hand saws." *Letters Patent sealed.*

FORBES. 9th July 1860.

1649. GEORGE FEDDIS FORBES, of Inverness, a Surgeon in Her Majesty's Bombay Army, for an invention for—"Improvements in machinery or apparatus for cleaning cotton." *Letters Patent sealed.*

MALFILLE. 9th July 1860.

1650. JACQUES CLÉMILLE MALFILLE, of Bordeaux, Town in the French Empire, Merchant, for an invention for—"An improved elastic band for sustaining and tightening pantaloons and waistcoats, drawers, petticoats or other dresses." *Provisional protection only.*

BROOMAN. 9th July 1860.

1651. RICHARD ARCHIBALD BROOMAN, of 166, Fleet Street, in the City of London, Patent Agent, for an invention for—"Improvements in railway breaks."—*A communication to him from abroad by Jean Jan called Paulet, of Canet, France.* *Provisional protection only.*

HEINDRYCKX. 9th July 1860.

1652. FLORIDE HEINDRYCKX, of Brussels, but now residing at Northumberland Street, Strand, in the City of Westminster, Engineer, for an invention for "Improvements in the construction of the permanent way of railways."

Provisional protection only.

NEWTON. 9th July 1860.

1653. ALFRED VINCENT NEWTON, of the Office for Patents, 66, Chancery Lane, in the County of Middlesex, Mechanical Draughtsman, for an invention for—"Improvements in the construction of portable ovens."—*A communication to him from abroad by Paul Plisson, of Bayonne, in the Empire of France.*

Provisional protection only.

PRITCHARD. 9th July 1860.

1654. WILLIAM HARPER PRITCHARD, of the Parish of Saint Luke's, in the County of Middlesex, Japanner, for an invention for—"An improved apparatus for amusing and exercising children, and assisting them in learning to walk."

Letters Patent sealed.

WILSON. 10th July 1860.

1655. ROBERT WILSON, Clerk, of Glasgow, County of Lanark, North Britain, for an invention for—"Improvements in the finishing and folding of textile fabrics."

Letters Patent sealed.

JORDESON. 10th July 1860.

1656. THOMAS POWDITCH JORDESON, of 25, Eastcheap, in the City of London, Ship Broker, for an invention for—"Improvements in life boats."

Letters Patent sealed.

MENNONS. 10th July 1860.

1657. MARC ANTOINE FRANÇOIS MENNONS, of the British and Foreign Patent Offices, 39, Rue de l'Echiquier, Paris, in the Empire of France, for an invention for—"An improved steam-boiler."—*A communication from Adolph Keifler, a person resident at Copenhagen, in the Kingdom of Denmark.* *Letters Patent sealed.*

MENNONS. 10th July 1860.

1658. MARC ANTOINE FRANÇOIS MENNONS, of the British and Foreign Patent Offices, 39, Rue de l'Echiquier, Paris, in the Empire of France, for an invention for—"Improvements in the construction and arrangement of apparatus for obtaining motive-power from heated compressed air."—*A communication from Frédéric Guibé, a person resident at Toulouse (Dep^t de la Haute Garonne.)*

Provisional protection only.

GREEN. GLOVER. 10th July 1860.

1659. ALFRED GREEN, and WILLIAM HENRY GLOVER, of Stourbridge, in the County of Worcester, Smiths, for an invention for—"An improvement in water tuyeres." *Provisional protection only.*

WARLICH. 10th July 1860.

1660. FERDINAND CHARLES WARLICH, of 14, London Street, Fenchurch Street, in the City of London, for an invention for "Improvements in the manufacture of artificial coal fuel and in apparatus employed in such manufacture."

Letters Patent sealed.

ZOUBTCHANINOFF. 10th July 1860.

1661. SWIATOSLAR ZOUBTCHANINOFF, Merchant, of Paris, Empire of France, 36, Boulevart des Batignolles, or of St. Petersbourg, Empire of Russia, for an invention for—"A cement to prevent the leaking of all liquids, and also dampness in buildings." *Provisional protection only.*

ZOUBTCHANINOFF. 10th July 1860.

1662. SWIATOSLAR ZOUBTCHANINOFF, Merchant, of Paris, Empire of France, 36, Boulevart Batignolles, or of St. Petersbourg, Empire of Russia, for an invention for—"An improved compound for the coating of wooden ships, boats and other structures used at sea." *Provisional protection only.*

BOEX. 10th July 1860.

1663. FRANÇOIS BOEX, of Bruxelles, in the Kingdom of Belgium, for an invention for—"Improvements in ornamenting glass surfaces."—*The result partly of a communication from abroad made to him by Pierre Jean de Rudder, and Jean Bonnefoy, both of Bruxelles, and partly of invention and discovery made by him.*

Letters Patent sealed.

SPEIGHT. 10th July 1860.

1664. GEORGE SPEIGHT, of 19, Woodbridge Street, Clerkenwell, in the County of Middlesex, Manufacturer, for an invention for—"An improved means of protecting watches and other small portable articles from being stolen from the person."

Provisional protection only.

FRANQUINET. 11th July 1860.

1665. EUGENE FRANQUINET, of Augrée, in the Kingdom of Belgium, and of 4, South Street, Finsbury, London, Manufacturer, for an invention for—"Improvements in the machinery or apparatus for rolling iron." *Letters Patent sealed.*

HALL. 11th July 1860.

1666. WILLIAM KEMBLE HALL, Engineer, of 36, Cannon Street, in the City of London, for an invention for—"Improvements in gas regulators."—*A communication to him from abroad by Calvin T. Herring, of St. Louis, in the United States of America.* *Letters Patent sealed.*

TROTMAN. 11th July 1860.

1667. THOMAS TROTMAN, of Crimscot Street, Grange Road, Bermondsey, in the County of Surrey, Pin Manufacturer, for an invention for—"An improved dress fastening." *Provisional protection only.*

CLARK. 11th July 1860.

1668. WILLIAM CLARK, of 53, Chancery Lane, in the County of Middlesex Engineer and Patent Agent, for an invention for—"Improvements in steam-engines."—*A communication to him from abroad by Mr. Charles Claude Etienne Minié, formerly Major in the Army of Paris, in the Empire of France.* *Provisional protection only.*

WALKER. 11th July 1860.

1669. ROBERT WALKER, of Glasgow, in the County of Lanark, North Britain, Merchant, for an invention for—"Improvements applicable to horse bits." *Provisional protection only.*

DAVIES. 11th July 1860.

1670. GEORGE DAVIES, of No. 1, Serle Street, Lincoln's Inn, in the County of Middlesex, and No. 28, St. Enoch Square, in the City of Glasgow, Civil Engineer and Patent Agent, for an invention for—"Improved apparatus for supplying steam-boilers with water."—*A communication to him from abroad by Messieurs Gargan & Co., of Paris, Builders.* *Letters Patent sealed.*

SMITH. 11th July 1860.

1671. ARTHUR SMITH, Manufacturing Chemist, sometime in Marsden, Lancashire, presently residing in Glasgow, in the County of Lanark, for an invention for—"Improvements in the material for sizing or dressing yarns preparatory to weaving." *Provisional protection only.*

WEBSTER. 11th July 1860.

1672. JOHN WEBSTER, of Leicester, Hosier, for an invention for—"Improvements in the construction of circular knitting-machinery." *Provisional protection only.*

DAVIS. 11th July 1860.

1673. JOHN DAVIS, of Cinderford, in the County of Gloucester, Mining Engineer, for an invention for—"Improvements in apparatus for the prevention of accidents at mines or pits." *Letters Patent sealed.*

JACK. 11th July 1860.

1674. JAMES JACK, of Liverpool, in the County of Lancaster, Engineer, for an invention for—"Improvements in the construction and arrangement of surface condensers for marine and land steam-engines." *Letters Patent sealed.*

POVAH. 11th July 1860.

1675. SAMUEL POVAH, of Liverpool, in the County of Lancaster, Engineer and Tool Maker, for an invention for—"An improved combined portable steam-engine winch, and apparatus or machinery for operating the pumps, and parts of the rigging, warping, raising the anchor, and for other uses on board ships where power is required, parts of the same being applicable for like uses separately." *Letters Patent sealed.*

PIZZI. 11th July 1860.

1676. PAUL PIZZI, of No. 9, Winsley Street, in the County of Middlesex, Artist, for an invention for—"Improvements in preparing and treating the surfaces of the interiors and exteriors of houses, edifices, monuments and other buildings, to imitate polished marble or stone, also rendering them impervious to the action of the atmosphere and other elements." *Letters Patent sealed.*

GIBBS. 12th July 1860.

1677. JOSEPH GIBBS, of Brentford, in the County of Middlesex, Civil Engineer, for an invention for—"Improvements in constructing submerged works." *Provisional protection only.*

HUGHES. 12th July 1860.

1678. EDWARD THOMAS HUGHES, of the firm of Hughes & Son, Patent Agents, 123, Chancery Lane, London, for an invention for—"Improvements in shrouds or winding sheets."—*A communication to him from abroad by Monsieur Antoine Conche, Medical Practitioner, of No. 1, Rue Adelaide Perrin, Lyons, in the Empire of France.* *Letters Patent sealed.*

ASKEW. 12th July 1860.

1679. JOHN ASKEW, of No. 27, Charles Street, Hampstead Road, N.W., in the County of Middlesex, Coppersmith, for an invention for—"Improvements in window sashes." *Letters Patent sealed.*

BREARLEY. 12th July 1860.

1680. THOMAS BREARLEY, of Dock Street, Whitechapel, Engineer, for an invention for—"Improvements in machinery for producing and revivifying animal charcoal." *Letters Patent sealed.*

GRAHAM. 12th July 1860.

1681. PETER GRAHAM, of Oxford Street, in the County of Middlesex, for an invention for—" Improvements in means or apparatus for operating roller blinds." *Provisional protection only.*

SHAW. 12th July 1860.

1682. HENRY SHAW, of Dublin, Ireland, Printer, for an invention for—" Improvements in means or apparatus for stopping railway trains." *Letters Patent sealed.*

AYCKBOURN. 12th July 1860.

1683. FREDERICK AYCKBOURN, of Mitcham Common, in the County of Surrey, Gentleman, for an invention for—" Improvements in tubular beds and bolsters." *Letters Patent sealed.*

OSBOURN. 12th July 1860.

1684. FREDERICK OSBOURN, of Aldersgate Street, in the City of London, Mechanician, for an invention for—" Improvements in the construction of endless saws and cutters." *Provisional protection only.*

MORDAN. 12th July 1860.

1685. FRANCIS MORDAN, of Goswell Road, in the County of Middlesex, Manufacturer, for an invention for—" Improvements in bottles, jars or vessels for holding blacking, and in certain appurtenances thereof, part of the invention being applicable to stoppers for bottles used for other purposes." *Letters Patent sealed.*

FERGUSON. 12th July 1860.

1686. JOHN FERGUSON, of Glasgow, in the County of Lanark, North Britain, Veneer Cutter, for an invention for—" Improvements in machinery or apparatus for sawing or cutting wood into veneers and planks."—*A communication to him from abroad by J. F. C. Wieland, of the City of Hamburgh, Machinist.* *Letters Patent sealed and specification filed by order.*

PARSONS. 13th July 1860.

1687. PERCEVAL MOSES PARSONS, of Arthur Street West, London Bridge, in the County of Middlesex, Civil Engineer, for an invention for—" Improvements in ordnance and fire-arms and in tools for rifling the same." *Provisional protection only.*

EDGE. 13th July 1860.

1688. JOHN WILLIAM EDGE, of the City of Manchester, in the County of Lancaster, Gun Manufacturer, for an invention for—" Improvements in rifled fire-arms, guns, and ordnance." *Letters Patent sealed.*

BOQUET. 13th July 1860.

1689. MARIE VIRGINIE BOQUET, of No. 60, Boulevart de Strasbourg, Paris, France, for an invention for—" Canisters or vessels fitted with moveable and hermetically stopping covers for containing preserved alimentary or other substances." *Provisional protection only.*

JUDKINS. 13th July 1860.

1690. CHARLES TIOT JUDKINS, of No. 22, Ludgate Street, in the City of London, Dealer in Sewing-machines, for an invention for—" Improvements in sewing-machines."—*The result partly of a communication made to him by Joseph Wetherby Bartlett, a person resident No. 421, Broadway, New York, in the United States of America, and partly of invention and discovery made by him.* *Provisional protection only.*

RISSE. 13th July 1860.

1691. FRANCIS JOSEPH RISSE, of Great Bland Street, Southwark, in the County of Surrey, for an invention for—" Improvements in gunlocks." *Provisional protection only.*

RISSE. 13th July 1860.

1692. FRANCIS JOSEPH RISSE, of Great Bland Street, Southwark, in the County of Surrey, for an invention for—" Improvements in pressure guages." *Provisional protection only.*

ANDERSON. 13th July 1860.

1693. GEORGE ANDERSON, of Leadenhall Street, in the City of London, Engineer, for an invention for—" Improvements in singeing pigs and in apparatus for the same." *Provisional protection only.*

STRATHERN. STRATHERN. STRATHERN. 13th July 1860.

1694. ANDREW STRATHERN, ANDREW STRATHERN, the younger, and ALLAN STRATHERN, all of Glasgow, in the County of Lanark, North Britain, Brass Founders, for an invention for—" Improvements in stop cocks or valves for regulating the flow of fluids." *Letters Patent sealed.*

HILL. 13th July 1860.

1695. CHARLES GREY HILL, of Commerce Square, High Pavement, in the Town and County of the Town of Nottingham, Lace Manufacturer, for an invention for—" Improvements in machinery for the manufacture of bonnet fronts, rouches and other millinery trimmings, or for other purposes." *Letters Patent sealed.*

ALLEN. ALLEN. 13th July 1860.

1696. WILLIAM ALLEN, of Great Alfred Street, in the Town and County of the Town of Nottingham, Engineer, and WILLIAM ALLEN, of Carrington, in the County of Nottingham, Engineer, for an invention for—" Improvements in the prevention of incrustation and corrosion of steam-engine boilers." *Letters Patent sealed.*

HENRY. 13th July 1860.

1697. MICHAEL HENRY, of 84, Fleet Street, in the City of London, Patent Agent, for an invention for—"Improvements in looms and in the jacquard apparatus of looms."—*A communication to him from abroad by Messieurs François Durand and Henry Auguste Pradel, of Paris, France.* *Letters Patent sealed.*

BRAGGE. 14th July 1860.

1698. WILLIAM BRAGGE, of the firm of John Brown and Company, Atlas Steel Works, Sheffield, in the County of York, for an invention for—"Improvements in the manufacture of tyres for railway wheels." *Letters Patent sealed.*

PILE. SMYTH. 14th July 1860.

1699. JOHN PILE, of West Hartlepool, in the County of Durham, Shipbuilder, and JOHN ROBERT SMYTH, of the same place, Painter, for an invention for—"Improvements in the preservation of iron surfaces from corrosion or decay." *Letters Patent sealed.*

AUSTIN. 14th July 1860.

1700. HENRY GEORGE AUSTIN, of the Grange, Canterbury, in the County of Kent, for an invention for—"Improved apparatus for propelling vessels." *Provisional protection only.*

LISTER. 14th July 1860.

1701. SAMUEL CUNLIFFE LISTER, of Manningham, in the County of York, for an invention for—"Improvements in machines for preparing silk, flax and other fibrous materials." *Letters Patent sealed.*

MILLER. 14th July 1860.

1702. THOMAS WILLIAM MILLER, of Her Majesty's Dockyard, Portsmouth, for an invention for—"Improvements in the construction of tubular boilers or steam generators and surface condensers, and such like apparatus, and in the method of forming, applying, fitting and using metal tubes for the same." *Provisional protection only.*

LINGFORD. LINGFORD. 14th July 1860.

1703. JOSEPH and SAMUEL LINGFORD, both of Bishop Auckland, in the County of Durham, for an invention for—"An improved machine for washing, drying and dressing currants." *Letters Patent sealed.*

DE NEVIERS. 14th July 1860.

1704. ALBRECHT DE NEVIERS, of New Cremorne Road, Chelsea, in the County of Middlesex, Gentleman, for an invention for—"Improvements in breech loading fire arms." *Provisional protection only.*

CORNISH. 14th July 1860.

1705. SAMUEL TOM CORNISH, of Beaumont Square, Mile End Road, in the County of Middlesex, Shipwright, for an invention for—"Improvements in ships' closets." *Provisional protection only.*

MECHIM. 14th July 1860.

1706. JEAN MECHIM, of White Horse Road, Croydon, in the County of Surrey, for an invention for—"Improvements in pianos and organs."—*A communication to him from abroad by Frederic Stanislas Wiart, of Chateauroux, Department of Indre, in the Empire of France.* *Provisional protection only.*

CHOLLET. 14th July 1860.

1707. MAXIMILIAN LOUIS JOSEPH CHOLLET, of 7, Rue Marbeuf, Paris, in the Empire of France, for an invention for—"A solid alimentary compound for making soups, seasoning meats, made dishes, and vegetables." *Provisional protection only.*

NEWTON. 14th July 1860.

1708. WILLIAM EDWARD NEWTON, of the Office for Patents, 66, Chancery Lane, in the County of Middlesex, Civil Engineer, for an invention for—"An improved manufacture of waterproof leather."—*A communication to him from abroad by Samuel La Forge, of Cleveland, State of Ohio, and Joseph Merwin, John Evans Bray, and Asa Goodell Trask, all of the City of New York, in the United States of America.* *Letters Patent sealed.*

NEWTON. 14th July 1860.

1709. ALFRED VINCENT NEWTON, of the Office for Patents, 66, Chancery Lane, in the County of Middlesex, Mechanical Draughtsman, for an invention for—"Improvements in the construction of windlasses."—*A communication to him from abroad by Joseph P. Manton, of Providence, Rhode Island, in the United States of America.* *Letters Patent sealed.*

HOPE. 14th July 1860.

1710. LEWIS HOPE, of No. 4, Bishopsgate Churchyard, in the County of Middlesex, for an invention for—"Improvements in 'knot-stitch' sewing-machines." *Letters Patent sealed.*

HENSON. 16th July 1860.

1711. WILLIAM FREDERICK HENSON, of New Cavendish Street, Portland Place, in the County of Middlesex, Civil Engineer, for an invention for—"Improvements in railway carriage buffer and other springs." *Letters Patent sealed.*

DANCHELL. 16th July 1860.

1712. FREDERICK LUDEWIG HAHN DANCHELL, of Great Queen Street, Westminster, Civil Engineer, for an invention for—"Certain improvements in filters." *Letters Patent sealed.*

IVERS. SMITH. 16th July 1860.

1713. SAMUEL IVERS, of Halshaw Moor, in the County of Lancaster, Mechanic, and MARK SMITH, of Heywood, in the same County, Machine Maker, for an invention for—"Improvements in machinery for communicating motion to and for stopping looms for weaving." *Provisional protection only.*

SMITH. 16th July 1860.

1714. ALFRED SMITH, of Manchester, in the County of Lancaster, Silk Manufacturer, for an invention for—"Certain improvements in the manufacture of velvet or other similar piled fabrics." *Provisional protection only.*

ROGERS. 16th July 1860.

1715. SAMUEL BALDWYN ROGERS, of Newport, in the County of Monmouth, Analytical Chemist, for an invention for—"An improvement in the smelting of iron ores." *Provisional protection only.*

BAUER. 16th July 1860.

1716. WILLIAM BAUER, of Munich, in the Kingdom of Bavaria, and No. 36, Burton Street, Burton Crescent, W.C., London, for an invention for—"An improved diving bell." *Provisional protection only.*

BAUER. 16th July 1860.

1717. WILLIAM BAUER, of Munich, in the Kingdom of Bavaria, and No. 36, Burton Street, Burton Crescent, W.C., London, for an invention for—"A new method of laying down and raising or cutting off for repairing and other purposes, of telegraph cables, chains, or ropes." *Provisional protection only.*

BAIN. 16th July 1860.

1718. ALEXANDER BAIN, of Clerkenwell Green, in the County of Middlesex, Engineer, for an invention for—"Improvements in means, apparatus or articles for holding and supplying ink." *Provisional protection only.*

BROOMAN. 16th July 1860.

1719. RICHARD ARCHIBALD BROOMAN, of 166, Fleet Street, in the City of London, Patent Agent, for an invention for—"An improved clip for holding tickets and other articles."—*A communication to him from abroad by Paul Ducasse, of Paris.* *Provisional protection only.*

BIRKS. BIRKS. 16th July 1860.

1720. WILLIAM BIRKS, the elder, of the Town of Nottingham, Machinist, and WILLIAM BIRKS, the younger, of the same Town, Machinist, for an invention for—"Improvements in bobbin net or twist lace machinery." *Letters Patent sealed.*

THIÉBAUT. 16th July 1860.

1721. JOSEPH THIÉBAUT, of Whitechapel, in the County of Middlesex, for an invention for—"Improvements in the ornamentation of textile fabrics." *Letters Patent sealed.*

NEWTON. 16th July 1860.

1722. WILLIAM EDWARD NEWTON, of the Office for Patents, 66 Chancery Lane, in the County of Middlesex, Civil Engineer, for an invention for—"An improved covering for roofs and walls."—*A communication to him from abroad by Rufus S. Lewis, of Lowell, Massachusetts, in the United States of America.* *Letters Patent sealed.*

GLOAG. 17th July 1860.

1723. HENRY GLOAG, of Edinburgh, in the County of Midlothian, Scotland, Captain in the Madras Artillery, for an invention for—"Improvements in breech loading fire-arms and cannons." *Letters Patent sealed.*

STEVENS. 17th July 1860.

1724. CHARLES STEVENS, Manager of the British & Foreign Office for Patents, No. 1B, Welbeck Street, Cavendish Square, London, in the County of Middlesex, for an invention for—"An improved method of preserving potatoes cut in pieces by a machine for that purpose."—*A communication to him from abroad by Vignal & Roustain, of Paris, in the Empire of France.* *Provisional protection only.*

HENSON. HENSON. 17th July 1860.

1725. JAMES HENSON, of Watford, in the County of Herts, and WILLIAM FREDERICK HENSON, of 15, New Cavendish Street, Portland Place, and 13, Parliament Street, Westminster, Civil Engineers, for an invention for—"Manufacturing canvas and other fabrics for tarpaulings, sacks, rick-cloths, ship sails and for other purposes, and also for uniting the edges of the same." *Letters Patent sealed.*

FLETCHER. 17th July 1860.

1726. JAMES FLETCHER, of Accrington, in the County of Lancaster, Machinist, for an invention for—"Improvements in machinery or apparatus for regulating the supply and discharge of fluids to steam-boilers, pipes and other vessels, and for cleansing or cleaning the same." *Letters Patent sealed.*

UNGER. 17th July 1860.

1727. LEOPOLD UNGER, of Bonn, in the Kingdom of Prussia, at present temporally resident at the Office for Patents, 123, Chancery Lane, London, for an invention for—"Improvements in the construction and arrangement of box irons used by laundresses and others for pressing and smoothing clothes and fabrics." *Letters Patent sealed.*

SEYDE. 17th July 1860.

1728. FRANCIS CHARLES SEYDE, of 55, Warren Street, Fitzroy Square, in the County of Middlesex, Cook, for an invention for—"Improved mechanism for pulping, triturating and comminuting for culinary and other purposes."
Letters Patent sealed.

SPENCER. 17th July 1860.

1729. GEORGE SPENCER, of No 6, Cannon Street West, London, Civil Engineer, for an invention for—"Improvements in the means or apparatus used for lubricating valves and pistons and other portions of locomotives and other engines worked by steam, air, gas, or vapour."—*A communication to him from abroad by Joseph Marks, of Hamilton, in the County of Wentworth, Canada.* *Letters Patent sealed.*

BAMLETT. 17th July 1860.

1730. ADAM CARLISLE BAMLETT, of Middleton Tyas, near Richmond, in the County of York, Farmer, for an invention for—"Improvements in reaping and mowing machines." *Letters Patent sealed.*

LOYSEL. 17th July 1860.

1731. EDWARD LOYSEL, of Cannon Street, in the City of London, Civil Engineer, for an invention for—"Improvements in locks or fastenings."—*A communication to him from abroad by Viscount de Kersolon, of Paris, in the Empire of France.*
Letters Patent sealed.

ESKELL. 17th July 1860.

1732. ABRAHAM ESKELL, of 8, Grosvenor Street, Grosvenor Square, for an invention for—"Improvements in beds or bases for artificial teeth."
Letters Patent sealed.

VALLANCE. 17th July 1860.

1733. PHILIP VALLANCE, of 4, Bolton Road, Abbey Road, St. John's Wood, in the County of Middlesex, for an invention for—"Improvements in the construction of telescopic sights for rifles and other fire-arms and ordnance."
Letters Patent sealed.

GOULSON. 17th July 1860.

1734. JOB GOULSON, of Ponsonby Terrace, Vauxhall Bridge Road, Westminster, for an invention for —"Improvements in gas and other fluid meters."
Letters Patent sealed.

SKEKEL. 18th July 1860.

1735. DONALD SKEKEL, of Demerara, British Guiana, and now of West Square, in the County of Surrey, Engineer, for an invention for—"Improvements in pistons for steam-engine and other cylinders, which improvements are also applicable to the buckets of pumps."—*The result partly of communication made to him from abroad by Alexander Skekel, of Demerara, and partly of invention and discovery made by him.*
Letters Patent sealed.

PICKSLEY. SIMS. 18th July 1860.

1736. JOHN PICKSLEY, and REUBEN SIMS, of Bedford Foundry, near Leigh, in the County of Lancaster, Agricultural Implement Makers, for an invention for—"Improvements in bone mills and logwood rasps." *Provisional protection only.*

DU TREMBLEY. MARTIN. 18th July 1860.

1737. PROSPER VERDUT DU TREMBLEY, and ANDRÈ DÈSIRÈ MARTIN, of Rouen, in the Empire of France, Civil Engineers, for an invention for—"Improvements in brake-apparatus suited for railway carriages and for other purposes."
Letters Patent sealed.

PIERCE. ISHERWOOD. 18th July 1860.

1738. THOMAS CAREY WILLARD PIERCE, of Manchester, in the County of Lancaster, Merchant, and GEORGE FREDERICK STANLEY ISHERWOOD, of the same place, Engraver, for an invention for—"Certain improvements in power looms for weaving." *Provisional protection only.*

GRAY. 18th July 1860.

1739. THOMAS GRAY, of 7, Bride Lane, in the City of London, for an invention for—"Improvements in the manufacture of flock such as is employed for flocking paper-hangings and for other purposes." *Provisional protection only.*

OXLAND. 18th July 1860.

1740. ROBERT OXLAND, of Plymouth, for an invention for—"Improvements in the manufacture of gunpowder." *Letters Patent sealed.*

JACKSON. JACKSON. 18th July 1860.

1741. SAMUEL PIM JACKSON, and ALBERT JACKSON, both of 2, Ashley Place, Bristol, for an invention for—"Improvements in the manufacture of window sashes, casements and other frames suitable for glazing." *Letters Patent sealed.*

BROOMAN. 18th July 1860.

1742. RICHARD ARCHIBALD BROOMAN, of 166, Fleet Street, in the City of London, Patent Agent, for an invention for—"The treatment of gluten in order to manufacture a substance to be employed in printing fabrics and other industrial uses, in substitution for albumen."—*A communication to him from abroad by Lies Bodard, of Strasbourg, France.* *Letters Patent sealed.*

HUNT.
18th July 1860.

1743. JAMES HUNT, Hair-trigger Manufacturer, of Birmingham, in the County of Warwick, for an invention for—" Certain improvements in hair-triggers or detents for single or double barrelled guns or pistols." *Letters Patent sealed.*

JOHNSON.
18th July 1860.

1744. JOHN HENRY JOHNSON, of 47, Lincoln's Inn Fields, in the County of Middlesex, and of 166, Buchanan Street, in the City of Glasgow, North Britain, Gentleman, for an invention for—" A new coloring matter and the means of obtaining the same."—*A communication to him from abroad by Louis Henry Obert, of 24, Rue Meslay, Paris, in the Empire of France.* *Letters Patent sealed.*

STEVENS.
18th July 1860.

1745. CHARLES STEVENS, Manager of the British and Foreign Office for Patents, No. 1B, Welbeck Street, Cavendish Square, in the County of Middlesex, for an invention for—" An improved screw cutting machine."—*A communication to him from abroad by J. B. Derenne, of Paris, in the Empire of France.*
Provisional protection only.

HOLLAND.
19th July 1860.

1746. HENRY HOLLAND, of Birmingham, in the County of Warwick, Manufacturer, for an invention for—" An improvement in the manufacture of steel tubular stretchers for umbrellas and parasols." *Provisional protection only.*

SHAW.
SHAW.
19th July 1860.

1747. ISAAC BROAD SHAW, of Tunstall, in the County of Stafford, Printer, and JAMES EDMUND SHAW, of Burslem, in the same County, Painter, for an invention for—" Improvements in the ornamentation or decoration of earthenware, porcelain, glass and other articles, and in producing the designs, figures, patterns, and roller moulds used in such process, such roller moulds being also applicable for the casting of rollers used in typographic and lithographic printing." *Provisional protection only.*

JOHNSON.
19th July 1860.

1748. JOHN HENRY JOHNSON, of 47, Lincoln's Inn Fields, in the County of Middlesex, and of 166, Buchanan Street, in the City of Glasgow, North Britain, Gentleman, for an invention for—" Improvements in the manufacture or production of white lead and in the machinery or apparatus employed therein."—*A communication to him from abroad by Georges Hyacinthe Ozouf, of 24, Rue Meslay, Paris, in the Empire of France.* *Letters Patent sealed.*

DAVIS.
19th July 1860.

1749. ISAAC NOAH DAVIS, of Brentford, in the County of Middlesex, for an invention for—" Producing spirit from rice, maize, barley or other grain."—*A communication to him from abroad by A. E. Ripoche, of Rouen, in France.*
Letters Patent sealed.

WOODCOCK.
19th July 1860.

1750. ALONZO BUONAPARTE WOODCOCK, of Manchester, India-rubber Manufacturer, for an invention for—" Improvements in the manufacture of moulded articles of vulcanised india-rubber." *Letters Patent sealed.*

BARRETT.
19th July 1860.

1751. WILLIAM BARRETT, of Norton, near Stockton-on-Tees, for an invention for—" Improvements in machinery to be used when casting metals."
Letters Patent sealed.

STENHOUSE.
19th July 1860.

1752. JOHN STENHOUSE, of 11, Upper Brunswick Terrace, Barnsbury Road, in the County of Middlesex, Chemist, for an invention for—" Improvements in purifying coal gas." *Provisional protection only.*

TYRRELL.
19th July 1860.

1753. TIMOTHY TYRRELL, of Guildhall Yard, in the City of London, Gentleman, for an invention for—" Improvements in the construction of tubular boilers."
Provisional protection only.

SAXBY.
19th July 1860.

1754. JOHN SAXBY, of Brighton, Signal Manufacturer, for an invention for—" Improvements in apparatus for and in the mode or method of working and governing railway points and signals." *Letters Patent sealed.*

CLARK.
19th July 1860.

1755. WILLIAM CLARK, of 53, Chancery Lane, in the County of Middlesex, Engineer and Patent Agent, for an invention for—" Improvements in valve apparatus for regulating the flow of steam and other fluids."—*A communication to him from abroad by Messrs. Charles Auguste Riff, Engineer, and Antoine Laudenmüller, Mechanician, of Paris, in the Empire of France.* *Provisional protection only.*

CLARK.
19th July 1860.

1756. WILLIAM CLARK, of 53, Chancery Lane, in the County of Middlesex, Engineer and Patent Agent, for an invention for—" Improvements in stamping or embossing presses."—*A communication to him from abroad by Mr. Laurent Poirier, Mechanician, of Paris, in the Empire of France.* *Provisional protection only.*

HÄHNEL. 20th July 1860.

1757. CHARLES WENZEL HÄHNEL, of the City of Manchester, Merchant, for an invention for—" Improvements in the construction of parts of umbrellas and parasols."—*A communication to him from abroad by Louis Prang, of Boston, in the United States of America.* *Letters Patent sealed.*

DICKINSON. 20th July 1860.

1758. JOSEPH DICKINSON, of Pendleton, near the City of Manchester, in the County of Lancaster, Civil Engineer and Inspector of Coal Mines, for an invention for—" Improvements in machinery for retarding or stopping railway or other carriages, and for other purposes where breaks are applicable." *Letters Patent sealed.*

BROAD. 20th July 1860.

1759. JOHN BROAD, Manager of Blast Furnaces and Iron Works, of Ulverston, in the County of Lancaster, for an invention for—" An apparatus for economising coal and other fuel to be used with hot or cold blast in the smelting of iron ores and remelting of pig iron." *Letters Patent sealed.*

PINKNEY. 20th July 1860.

1760. ROBERT PINKNEY, of 18, Bread Street Hill, in the City of London, for an invention for—" An improved pencil-case." *Provisional protection only.*

KENNY. 20th July 1860.

1761. JOHN KENNY, of No. 21, Litchfield Street, Soho, in the County of Middlesex, Machinist, for an invention for—" Improvements in sewing-machines." *Provisional protection only.*

JUMELAIS. 20th July 1860.

1762. ANGE JUMELAIS, of Rennes, in the French Empire, for an invention for—" Using 'plenum' to create an unlimitad and almost gratuitous motive-power, and also the means by which the same is effected,—being a new principle to create an illimited motive-power." *Provisional protection NOT granted.*

POULTER. 20th July 1860.

1763. HENRY WILLIAM POULTER, of Thayer Street, Manchester Square, in the County of Middlesex, Compositor, for an invention for—" Improvements in the arrangement and construction of printers' composing cases and in the frames used therewith." *Letters Patent sealed.*

GUFFROY. 20th July 1860.

1764. CHARLES CONSTANT JOSEPH GUFFROY, of Lille, Town in the French Empire, Merchant, for an invention for—" Improvements in preparing the livers of salt water fish."—*A communication from Augustin Joseph Despinoy, resident at Lille, in the French Empire.* *Letters Patent sealed.*

NEWTON. 20th July 1860.

1765. ALFRED VINCENT NEWTON, of the Office for Patents, 66, Chancery Lane, in the County of Middlesex, Mechanical Draughtsman, for an invention for—" Improvements in the manufacture of apparatus for regulating the force of electric currents."—*A communication to him from abroad by Giovanni Caselli, of Florence.* *Provisional protection only.*

BEDELLS. 20th July 1860.

1766. CALEB BEDELLS, of Leicester, for an invention for—" Improvements in the manufacture of braces." *Provisional protection only.*

LAKE. 21st July 1860.

1767. WILLIAM LAKE, of the firm of Joseph Lake and Son, of the Old Kent Road, in the County of Surrey, Bedstead Makers, for an invention for—" An improved button or fastening for iron bedsteads and other purposes." *Provisional protection only.*

HOLLIS. 21st July 1860.

1768. EBENEZER HOLLIS, Gun and Pistol Manufacturer, of Birmingham, in the County of Warwick, for an invention for—" Certain improvements in muzzle loading guns applicable for military and sporting purposes, parts of which are also applicable to certain descriptions of pistols and breech loading guns, as also in the manner of fixing or connecting bayonets to military guns." *Letters Patent sealed.*

YOUNG. 21st July 1860.

1769. JAMES HADDEN YOUNG, of 66, Great College Street, Camden Town, in the County of Middlesex, for an invention for—" Improvements in setting up (composing) and distributing type." *Letters Patent sealed.*

TURNER. GIBSON. 21st July 1860.

1770. WILLIAM TURNER, and JOHN WILLIAM GIBSON, of the Hammersmith Works, Dublin, for an invention for—" Improvements in bridges." *Letters Patent sealed.*

ROBERTS. 21st July 1860.

1771. SAMUEL ROBERTS, of Hull, in the County of York, Smith, for an invention for—" Improvements in harrows." *Letters Patent sealed.*

MENNONS. 21st July 1860.

1772. MARC ANTOINE FRANÇOIS MENNONS, of the British and Foreign Patent Offices, 39, Rue de l'Echiquier, Paris, in the Empire of France, for an invention for—" Improvements in the construction and arrangement of marine steam-engines."—*A communication from Vincent Gâche, Sen^r, residing at Nantes (Loire Inférieure).* *Complete specification; Letters Patent sealed.*

NEWTON. 21st July 1860.

1773. WILLIAM EDWARD NEWTON, of the Office for Patents, 66, Chancery Lane, in the County of Middlesex, Civil Engineer, for an invention for—"Improvements in looms for weaving."—*A communication to him from abroad by Mr. Van Peteghem, of Ghent, in the Kingdom of Belgium.* *Letters Patent sealed.*

NORMANDY. 21st July 1860.

1774. ALPHONSE RENÉ LE MIRE NORMANDY, of Odin Lodge, King's Road, Clapham Park, in the County of Surrey, for an invention for—"Improvements in connecting gas and other pipes." *Letters Patent sealed.*

HEWENS. 23rd July 1860.

1775. RICHARD HEWENS, of Leamington, in the County of Warwick, for an invention for—"An improvement in kitchen ranges, which is also applicable to stoves in general." *Letters Patent sealed.*

GREEN. 23rd July 1860.

1776. HENRY GREEN, of Bolton-le-Moors, in the County of Lancaster, Gas Engineer, for an invention for—"Improvements in charging and drawing the charge from gas retorts, and in the machinery employed in performing such operations." *Letters Patent sealed.*

NOIROT. 23rd July 1860.

1777. JEAN BAPTISTE JULES NOIROT, of Paris, in the French Empire, Manufacturer, for an invention for—"An improved method of manufacturing india-rubber tubes and various articles." *Letters Patent sealed.*

BROOMAN. 23rd July 1860.

1778. RICHARD ARCHIBALD BROOMAN, of 166, Fleet Street, in the City of London, Patent Agent, for an invention for—"A method of and machinery for goffering or impressing, coloring and gilding or otherwise covering with metal, leather and fabrics and substances in a sheet state."—*A communication to him from abroad by Jacques Michel Dulud, of Paris, in the French Empire.* *Letters Patent sealed.*

BIRKBECK. 23rd July 1860.

1779. GEORGE HENRY BIRKBECK, of the firm of Tongue & Birkbeck, of 34, Southampton Buildings, Chancery Lane, in the County of Middlesex, Patent Agents and Engineers, for an invention for—"Improvements in the construction of chimnies for lamps or apparatus for transmitting light."—*A communication to him from abroad by Etiénne Soulié, Manufacturer, of Paris, in the Empire of France.* *Letters Patent sealed.*

TURNER. 23rd July 1860.

1780. ARCHIBALD TURNER, of Leicester, Elastic Web Manufacturer, for an invention for—"Improvements in the manufacture of elastic fabrics." *Provisional protection only.*

SULLIVAN. 23rd July 1860.

1781. JOHN WELLS SULLIVAN, of Adam Street, Adelphi, in the City of Westminster, Gentleman, for an invention for—"Improved machinery applicable to washing and churning and the mixing of fluids."—*A communication to him from abroad by Charles Sullivan, and William Francis Hyatt, of New York City.* *Letters Patent sealed.*

JONES. 24th July 1860.

1782. HENRY JONES, of Neath, in the County of Glamorgan, Boiler-maker, for an invention for—"Improvements in rails for railways." *Provisional protection only.*

CLARK. 24th July 1860.

1783. WILLIAM CLARK, of 53, Chancery Lane, in the County of Middlesex, Engineer and Patent Agent, for an invention for—"Improvements in apparatus for setting and sharpening scythes and other like instruments."—*A communication to him from abroad by Mr. Pierre Charles Ratel, of Paris, in the Empire of France, Agricultural Machinist.* *Letters Patent sealed.*

ROBERTSON. RITCHIE. 24th July 1860.

1784. ANDREW ROBERTSON, of Neilston, in the County of Renfrew, and ALEXANDER RITCHIE, of Glasgow, in the County of Lanark, for an invention for—"Improvements in steam-boiler and other furnaces or fireplaces, in pyrometers, and in the prevention of smoke." *Letters Patent sealed.*

LE RICHEUX. 24th July 1860.

1785. LEWIS LE RICHEUX, of Sussex Road, Brixton, in the County of Surrey, Collar Maker, for an invention for—"Improvements in the means of attaching buttons or studs to articles of clothing or other similar articles, and in the buttons or studs to be adapted thereto." *Provisional protection only.*

HARRISON. BRADBURY. BUCKLEY. 24th July 1860.

1786. EDWARD HARRISON, of Oldham, in the County of Lancaster, Schoolmaster, WILLIAM BRADBURY, of the same place, Mechanic, & JAMES BUCKLEY, of the same place, Weaver, for an invention for—"A certain improved compound or compounds to be used as a substitute for gunpowder." *Provisional protection only.*

HIRSCH. 24th July 1860.

1787. HERMANN HIRSCH, of Berlin, in the Kingdom of Prussia, and of Bridge Road, Lambeth, in the County of Surrey, Civil Engineer, for an invention for—"Improvements in screw propellers." *Letters Patent sealed.*

MACAIRE. 24th July 1860.

1788. LOUIS CYRUS MACAIRE, of Paris, in the Empire of France, Artist, for an invention for—"A substitute for nitrate of silver particularly applicable to photographic purposes." *Provisional protection only.*

THOMAS. 24th July 1860.

1789. REBECCA THOMAS, of Bath Street, Tabernacle Square, in the County of Middlesex, for an invention for—"Improvements in the tires of wheels for vehicles used on common roads." *Provisional protection only.*

BRUNNER. LEVETT. 24th July 1860.

1790. WILLIAM BRUNNER, of Printing House Square, in the City of London, and WILLIAM HALL LEVETT, of Clare Street, Lincoln's Inn Fields, in the County of Middlesex, for an invention for—"An improved apparatus for increasing the illuminating power of coal gas, also for economizing the consumption thereof, and for regulating the pressure from street mains." *Provisional protection only.*

NEWTON. 24th July 1860.

1791. ALFRED VINCENT NEWTON, of the Office for Patents, 66, Chancery Lane, in the County of Middlesex, Mechanical Draughtsman, for an invention for—"Improved means for relieving the slide valves of steam-engines of unnecessary pressure."—*A communication to him from abroad by David Stoddart, of the City of San Francisco, State of California, United States of America.* *Letters Patent sealed.*

RUMBLE. 24th July 1860.

1792. ROBERT ALEXANDER RUMBLE, of Trinity Square, in the Borough of Southwark, Civil Engineer, for an invention for—"Improved apparatus for feeding fuel to fireplaces or furnaces." *Letters Patent sealed.*

NEWTON. 24th July 1860.

1793. WILLIAM EDWARD NEWTON, of the Office for Patents, 66, Chancery Lane, in the County of Middlesex, Civil Engineer, for an invention for—"An improved mathematical or plotting instrument which he intends to denominate a protracting trigonometer."—*A communication to him from abroad by Josiah Lyman, of Lenox, in the County of Berkshire, and State of Massachusetts, United States of America.* *Letters Patent sealed.*

FAIRBAIRN. BARROW. 24th July 1860.

1794. Sir PETER FAIRBAIRN, Knight, and JOSEPH BARROW, Mechanic, both of Leeds, in the County of York, for an invention for—"An improvement in the construction of self-acting lathes." *Letters Patent sealed.*

TAYLOR. 25th July 1860.

1795. WILLIAM EDWARD TAYLOR, of Enfield, near Accrington, in the County of Lancaster, Cotton Spinner and Manufacturer, for an invention for—"Certain improvements in looms for weaving." *Letters Patent sealed.*

HÉDOU. 25th July 1860.

1796. EUGÈNE HÉDOU, of 2, Rue Saint Appoline, Paris (Empire of France), and of 4, South Street, Finsbury, London, for an invention for—"Improvements in the manufacture of "tar paper," which improvements may also be applied to several other uses." *Provisional protection only.*

LEVERSON. 25th July 1860.

1797. MONTAGUE RICHARD LEVERSON, of No. 12, Saint Helen's Place, in the City of London, Solicitor and Patent Agent, for an invention for—"Improvements in applying springs to locomotive engines and to railway and other carriages."—*A communication to him from abroad by William Hogg Brown, of Erie, Pennsylvania, in the United States of America, Engineer.* *Letters Patent sealed.*

KINGSLEY. 25th July 1860.

1798. JEFFRIES KINGSLEY, of 52, Great Coram Street, in the County of Middlesex, Lieutenant on Half Pay of Her Majesty's Third Regiment of Dragoons, for an invention for—"Improvements in railways and in carriages to be used thereon." *Provisional protection only.*

MENNONS. 25th July 1860.

1799. MARC ANTOINE FRANÇOIS MENNONS, of the British and Foreign Patent Offices, 39, Rue de l'Echiquier, Paris, in the Empire of France, for an invention for—"Improvements in the processes of and apparatus for unwinding silk from cocoons."—*A communication from Pasquale Andervalt, and Giuseppe Piazza, both resident at Trieste (Illyria).* *Provisional protection only.*

MENNONS. 25th July 1860.

1800. MARC ANTOINE FRANÇOIS MENNONS, of the British and Foreign Patent Offices, 39, Rue de l'Echiquier, Paris, in the Empire of France, for an invention for—"Improvements in etching on zinc."—*A communication from Edouard Eugène Raynal, and Emile Bellot, both resident at Paris.* *Letters Patent sealed; no specification filed.*

WILKINSON. MEAKIN. 25th July 1860.

1801. SAMUEL JAMES WILKINSON, & GEORGE FREDERICK LEE MEAKIN, trading under the firm of Wilkinson and Meakin, at No. 14A, Saint Mary Axe, in the City of London, Merchants, for an invention for—"Improvements in the construction of boxes, trunks or packing cases, to be called the 'plicabilis' or folding box, trunk or packing case." *Provisional protection only.*

HARTLEY. 25th July 1860.

1802. THOMAS HARTLEY, of Bury, in the County of Lancaster, Gardener, for an invention for—"An improved fibrous material for manufacturing woven fabrics." *Provisional protection only.*

PILKINGTON. 25th July 1860.

1803. JOHN PILKINGTON, of Fish Street Hill, in the City of London, Asphalte Importer and Bitumen Manufacturer, for an invention for—"Improvements in mean for protecting and making water-tight exposed surfaces such as railway arches, bridges, roofs and other structures." *Letters Patent sealed.*

ASH. 25th July 1860.

1804. HENRY CLARKE ASH, of 11, Claylands Terrace, Clapham Road, in the County of Surrey, for an invention for—"Improvements in apparatus employed in cooling and freezing liquids." *Letters Patent sealed.*

LANCASTER. BROWN. HUGHES. 25th July 1860.

1805. CHARLES WILLIAM LANCASTER, of New Bond Street, in the County of Middlesex, Gun-maker, JAMES BROWN, of Newport, in the County of Monmouth, Iron Master, and JOHN HUGHES, also of Newport, aforesaid, Engineer, for an invention for—"Improvements in the manufacture of plates for coating or covering and strengthening ships and other structures, and in fixing the same." *Letters Patent sealed.*

CAMBACÉRÈS. 25th July 1860.

1806. JULES LÉONARD LOUIS CAMBACÉRÈS, of Paris, in the French Empire, Chief Engineer of Bridges and Roads, for an invention for—"Certain improvements in treating fatty and oily matters." *Letters Patent sealed.*

NEWTON. 25th July 1860.

1807. ALFRED VINCENT NEWTON, of the Office for Patents, 66, Chancery Lane, in the County of Middlesex, Mechanical Draughtsman, for an invention for—"An improvement in the process of concentrating and crystallizing sugar."—*A communication to him from abroad by Horatio N. Fryatt, of Belleville, in the County of Essex State of New Jersey, United States of America.* *Letters Patent sealed.*

ROSE. 25th July 1860.

1808. WILLIAM ROSE, of Hales Owen, in the County of Worcester, Manufacturer, for an invention for—"Improvements in breech-loading fire-arms and ordnance." *Letters Patent sealed.*

SMITH. SUCKLEY. 25th July 1860.

1809. ROBERT THURSFIELD SMITH, & THOMAS SUCKLEY, both of Whitchurch, in the County of Salop, Agricultural Implement Makers, for an invention for—"Improved apparatus for smutting and screening grain and distributing other granular substances." *Letters Patent sealed.*

FOWLER. FOWLER. 25th July 1860.

1810. THADDEUS FOWLER, and DE GRASSE FOWLER, of Northford, in the State of Connecticut, United States of America, for an invention for—"Improvements in machinery for manufacturing pins." *Letters Patent sealed.*

KABERRY. 25th July 1860.

1811. LEONARD KABERRY, of Rochdale, in the County of Lancaster, Manager, for an invention for—"Improvements in machinery or apparatus for preparing, spinning and doubling cotton and other fibrous materials." *Letters Patent sealed.*

DOWNING. 26th July 1860.

1812. THOMAS MARSHALL DOWNING, Engineer, of Handsworth, in the County of Stafford, for an invention for—"Certain improvements in tanks, vats or vessels to be used for holding, keeping or storing of malt liquors, wines, spirits and other liquids for human consumption." *Provisional protection only.*

THOMPSON. 26th July 1860.

1813. JOSEPH THOMPSON, of the firm of Broadhead & Co., Britannia Works, Sheffield, Manufacturer, for an invention for—"An improvement in covers for jugs, also applicable to covers for other articles." *Letters Patent sealed.*

HENRY. 26th July 1860.

1814. MICHAEL HENRY, of 84, Fleet Street, in the City of London, Patent Agent, for an invention for—"Improvements in engines for obtaining motive-power."—*A communication to him from abroad by Francis Million, of 33, Boulevard St. Martin Paris, France.* *Letters Patent sealed.*

BONELLI. 26th July 1860.

1815. GAETANO BONELLI, of Milan, in the Kingdom of Sardinia, Gentleman, now residing at Queen Square, Bloomsbury, in the County of Middlesex, for an invention for—"Improvements in the manufacture of felted fabrics and paper."—*A communication to him from abroad by Jean Manzoni, of Milan.* *Provisional protection only.*

GÉLIS. 26th July 1860.

1816. AMÉDÉE GÉLIS, of 29, Boulevart St. Martin, Paris, in the Empire of France, Chemist, for an invention for—"Improvements in preparing compounds of cyanogen and principally of prussiates, by means of sulphuretted carbamids or amids which supply sulphurets of carbon by their decomposition." *Letters Patent sealed.*

CAMPBELL. 27th July 1860.

1817. WILLIAM CAMPBELL, Civil Engineer, of Hollinshead Hall, near Withnell, Chorley, in the County of Lancaster, for an invention for—"Improvements in the form of steam ships." *Provisional protection only.*

SCHÖN. 27th July 1860.

1818. CARL SCHÖN, of Minden, in the Kingdom of Prussia, Merchant, for an invention for—"Improvements in the construction of propelling wheels for ships." *Provisional protection only.*

GROSSETETE. 27th July 1860.

1819. CHARLES ARMAND GROSSETETE, Bedding Manufacturer, 11, Cranbourn Street, Leicester Square, Midx., for an invention for—"An improved reversed conicle nonswerving spring mattrass." *Provisional protection only.*

BISHOP. 27th July 1860.

1820. JAMES BISHOP, of No. 1A, Gloucester Street, Gloucester Gate, Regent's Park, in the County of Middlesex, Coal Merchant, for an invention for—"Improvements in kitchen ranges and their boilers and ovens, some of which improvements are also applicable to kettles and other utensils or apparatus for heating or cooking." *Provisional protection only.*

BRIGGS. 27th July 1860.

1821. EDWARD BRIGGS, of Castleton Mills, near Rochdale, in the County of Lancaster, Silk Spinner and Manufacturer, for an invention for—"The application of spun silk waste made in winding and weaving, to manufacturing purposes, and improvements in machinery employed in operating on such silk waste." *Provisional protection only.*

DUGDALE. 27th July 1860.

1822. EDWARD DUGDALE, of the Soho Foundry, Blackburn, in the County of Lancaster, Machine Maker, for an invention for—"Certain improvements in looms for weaving." *Letters Patent sealed.*

RENSHAW. 27th July 1860.

1823. JOSEPH RENSHAW, of Ordsal Lane, Salford, in the County of Lancaster, Machinist, for an invention for—"Improvements in machinery or apparatus for finishing velvets, velveteens and other pile fabrics." *Letters Patent sealed.*

BROOMAN. 27th July 1860.

1824. RICHARD ARCHIBALD BROOMAN, of 166, Fleet Street, in the City of London, Patent Agent, for an invention for—"Improvements in belts."—*A communication to him from abroad by Henri Dollier, of Paris.* *Letters Patent sealed.*

BROOMAN. 27th July 1860.

1825. RICHARD ARCHIBALD BROOMAN, of 166, Fleet Street, in the City of London, Patent Agent, for an invention for—"Improvements in the manufacture of linseed oil and in apparatus for the same."—*A communication to him from abroad by Joseph Poole Pirsson, of New York.* *Letters Patent sealed.*

TERRILL. 27th July 1860.

1826. SAMUEL TERRILL, of Redruth, in the County of Cornwall, Oven and Stove Manufacturer, for an invention for—"Improvements in open air cooking apparatus." *Letters Patent sealed; no specification filed.*

OLORENSHAW. 27th July 1860.

1827. JOSEPH OLORENSHAW, of the firm of James Hoddell and Company, of Coventry, Manufacturers, for an invention for—"An improvement or improvements in spectacle frames."—*A communication to him from abroad by Louis Strite Fellows, of New York, in the United States of America.* *Provisional protection only.*

WILSON. 27th July 1860.

1828. THOMAS WILSON, of Birmingham, in the County of Warwick, Engineer, for an invention for—"Improvements in breech loading fire-arms and ordnance." *Provisional protection only.*

JEYES. 27th July 1860.

1829. JOHN JEYES, of 17, Cheyne Walk, Chelsea, for an invention for—"Improvements in the manufacture of boots and shoes." *Letters Patent sealed.*

JACKSON. 27th July 1860.

1830. HENRY JACKSON, of Oak Works, Oak Lane, Limehouse, in the County of Middlesex, for an invention for—"Improvements in fire bars." *Letters Patent sealed.*

DAKIN. DAKIN. 28th July 1860.

1831. JOHN and GEORGE DAKIN, both of Heywood, in the County of Lancaster, Roller Coverers, for an invention for—"Improvements in machinery employed in covering top rollers used in preparing, spinning and doubling cotton and other fibrous materials." *Letters Patent sealed.*

BROWN. HODGSON. 28th July 1860.

1832. HENRY BROWN, and BROOK HODGSON, of Halifax, in the County of York, Manufacturers, for an invention for—"Improvements in the manufacture of a certain cloth or fabric commonly called 'Utrecht velvet.'" *Provisional protection only.*

HUNT. 28th July 1860.

1833. GEORGE CHARLES HUNT, of Baltic Cottage, Rotherhithe, in the County of Surrey, Asphalte Manufacturer, for an invention for—"Improvements in coloring bricks, tiles and other similar articles." *Provisional protection only.*

D'AUXY. 28th July 1860.

1834. GASTON CHARLES ANGE Marquis D'AUXY, of No. 57, Rue Lafayette, in the City of Paris, Empire of France, for an invention for—"An improved apparatus for the preservation of corn." *Letters Patent sealed.*

MORRIS. 28th July 1860.

1835. WILLIAM MORRIS, of Lambeth, in the County of Surrey, for an invention for—"Improvements in the construction of ships or vessels, and in the mode of propelling them." *Provisional protection only.*

LANSDELL. 28th July 1860.

1836. LAWSON LANSDELL, of Ipswich, in the County of Suffolk, Engine Smith, for an invention for—"Improvements in the manufacture of harrows." *Provisional protection only.*

HAMILTON. 28th July 1860.

1837. JOHN HAMILTON, Junior, of Liverpool, for an invention for—"Improvements in vessels to be propelled by steam power." *Letters Patent sealed.*

BIRKBECK. 28th July 1860.

1838. GEORGE HENRY BIRKBECK, of the firm of Tongue & Birkbeck, of 34, Southampton Buildings, Chancery Lane, in the County of Middlesex, Patent Agents and Engineers, for an invention for—"Improvements in looms for weaving velvet or other cut pile fabrics."—*A communication to him from abroad by Elie Dominique Baril, Manufacturer, of Paris, in the Empire of France.* *Letters Patent sealed.*

HODGSON. 28th July 1860.

1839. JOHN PICKERING HODGSON, of Pilgrim Street, Newcastle-upon-Tyne, in the County of Northumberland, Commission Agent, for an invention for—"An improved coffee pot." *Provisional protection only.*

IRELAND. 28th July 1860.

1840. JAMES IRELAND, of Wambrechies, near Lille, in the Empire of France, Flax Spinner, for an invention for—"Improvements in machinery or apparatus for treating hemp, flax, tow and other fibrous substances." *Letters Patent sealed.*

PAPE. 28th July 1860.

1841. JEAN HENRI PAPE, of 39, Rue de l'Echiquier, Paris, in the Empire of France, Knight of the Legion of Honour, for an invention for—"Improvements in the construction of piano-fortes." *Letters Patent sealed.*

CARPENTER. 28th July 1860.

1842. SAMUEL ALFRED CARPENTER, of Birmingham, in the County of Warwick, Manufacturer, for an invention for—"A new or improved adjuster for adjusting the backs of waistcoasts and trousers; which said adjuster may also be used as a substitute for the fastenings ordinarily employed in fastening gloves, garters, and belts." *Letters Patent sealed.*

ROME. 30th July 1860.

1843. LOUIS ROME, of the Route du pont de fer, near Grenoble, in the Empire of France, for an invention for—"A machine for the fabrication of fishing or other nets." *Letters Patent sealed.*

SEARLE. 30th July 1860.

1844. FRANCIS WILLIAM SEARLE, of Coleman Street, in the City of London, Auctioneer and Surveyor, for an invention for—"An improved apparatus for giving information at doors and places of business." *Provisional protection only.*

RAHILL. 30th July 1860.

1845. JAMES RAHILL, of Ramsgate, in the County of Kent, Gentleman, for an invention for—"Improvements in quadrants, sextants or other similar instruments to which artificial horizons are applicable." *Letters Patent sealed.*

GOUGH. 30th July 1860.

1846. WILLIAM GOUGH, of Birmingham, in the County of Warwick, Miller, for an invention for—"An improvement or improvements in balancing millstones." *Provisional protection only.*

NEWTON. 30th July 1860.

1847. WILLIAM EDWARD NEWTON, of the Office for Patents, 66, Chancery Lane, in the County of Middlesex, Civil Engineer, for an invention for—"An improvement in brushes for the hair or other purposes."—*A communication to him from abroad by John R. Ingersoll, of the City of New York.* *Letters Patent sealed.*

GREAVES. 30th July 1860.

1848. HILTON GREAVES, of Oldham, in the County of Lancaster, Cotton Manufacturer, for an invention for—"Improvements in hecks or mechanism or arrangements used in warping yarns or threads." *Letters Patent sealed*

NICHOLSON. 30th July 1860.

1849. JOSEPH NICHOLSON, of Chaple House, Hensingham, Whitehaven, in the County of Cumberland, Agricultural Implement Maker, for an invention for—"Improvements in reaping and mowing machines.' *Letters Patent sealed.*

SPENCE. 30th July 1860.

1850. WILLIAM SPENCE, of 50, Chancery Lane, in the County of Middlesex, Patent Agent, for an invention for—"Improvements in the manufacture of hats."—*A communication to him from abroad by Pierre Dujaric, of Paris, in the Empire of France, Hat Maker.* *Provisional protection only.*

HEDLEY. 30th July 1860.

1851. OSWALD DODD HEDLEY, of Newcastle-upon-Tyne, Gentleman, for an invention for—"Improvements in obtaining motive-power and in evaporating liquids." *Letters Patent sealed.*

DONNET. 31st July 1860.

1852. ALPHONSE VITAL DONNET, of Lyons, in the Empire of France, Civil Engineer, for an invention for—"An improved registering water meter." *Letters Patent sealed.*

DOUGLAS. 31st July 1860.

1853. JOHN MONTEATH DOUGLAS, residing in Cupar, Fife, Scotland, Writer, for an invention for—"Improvements in the delivery of the cut crop from reaping and mowing machines." *Provisional protection only.*

DIXON. 31st July 1860.

1854. ADAM DIXON, of Birmingham, in the County of Warwick, Engineer, for an invention for—"Improvements in knife cleaning machines." *Letters Patent sealed.*

FORD. 31st July 1860.

1855. HENRY WILLIAM FORD, of the City of Gloucester, Civil Engineer, for an invention for—"Improvements in elastic buffing and drawing apparatus suitable for railway vehicles." *Provisional protection only.*

GOUCHER. 31st July 1860.

1856. JOHN GOUCHER, of Worksop, in the County of Nottingham, Iron Founder, Engineer and Machinist, for an invention for—"An improvement in beaters for thrashing-machines." *Letters Patent sealed.*

JARVIS. 31st July 1860.

1857. JOHN STEPHEN JARVIS, one of the Managers in the employment of Dent, Allcroft, Lycett and Company, of Wood Street, in the City of London, Warehouseman, for an invention for—"An improved scarf or neck tie." *Provisional protection only.*

PICKSTONE. 31st July 1860.

1858. WILLIAM PICKSTONE, of 32, York Street, Manchester, for an invention for—"Improvements in the manufacture of tubes or pipes." *Letters Patent sealed.*

TREVITHICK. JONES. 31st July 1860.

1859. FREDERICK HENRY TREVITHICK, of Guildford Road, Clapham, in the County of Surrey, Engineer, and RICHARD JONES, of Botolph Lane, in the City of London, Merchant, for an invention for—"Improvements in means or apparatus to be used in effecting the preservation of animal and vegetable substances." *Letters Patent sealed.*

WILLCOCK. 31st July 1860.

1860. JOSEPH WILLCOCK, of 89, Chancery Lane, London, Patent Agent and Civil Engineer, for an invention for—"Improvements in photographic apparatus." —*A communication to him from abroad by Pierre M. T. O. Coen Albites, of 34, Rue Vivienne, in the City of Paris, Photographer.* *Letters Patent sealed; specification filed by order.*

JACKSON. 1st August 1860.

1861. JOSHUA JACKSON, of 29, Queen Street, Wolverhampton, in the County of Stafford, for an invention for—"Purifying and cooling water and atmospheric air, which he calls 'the carbonic aërial water and air purifier and cooler.'" *Letters Patent sealed.*

WHITEHOUSE. 1st August 1860.

1862. EDWARD ORANGE WILDMAN WHITEHOUSE, of Brighton, in the County of Sussex, Electrician, for an invention for—"Improvements in testing insulated conductors." *Provisional protection only.*

ROBERTS. 1st August 1860.

1863. JOSEPH ROBERTS, of 7, Old Jewry, in the City of London, Civil Engineer, for an invention for—"A continuous or ratchet spanner." *Complete specification; Letters Patent sealed.*

RYDE. 2nd August 1860.

1864. JOHN RYDE, of 27, Queen Street, Cheapside, Merchant, for an invention for—"An improvement in apparatus applicable to turn tables, swing bridges, cranes, and other machinery acting on a pivot."—*A communication to him from abroad by Mr. Frédéric Paul, of N° 20, Rue Neuve St. Augustin, Paris.* *Provisional protection only.*

RIPLEY. 2nd August 1860.

1865. ABRAHAM RIPLEY, of 42, Bridge Street, Blackfriars, City of London, Engineer, for an invention for—"Improvements in the mode and process of treating the waste and refuse of leather, and in the mode of treating and operating upon these in order to form a new article or fabric." *Letters Patent sealed.*

HAAS. 2nd August 1860.

1866. ALBERT FREDERICK HAAS, of Jewin Street, in the City of London, Merchant, for an invention for—"Improvements in dolls."—*A communication to him from abroad by Fischer Naumann & Company, of Ilmenau, Saxe-Weimar.* *Letters Patent sealed.*

PARTRIDGE. 2nd August 1860.

1867. EBENEZER PARTRIDGE, of Stourbridge, in the County of Worcester, Engineer and Iron Founder, for an invention for—"Improvements in axles and axle boxes." *Letters Patent sealed.*

GRANT. 2nd August 1860.

1868. JOHN GRANT, of Hyde Park Street, in the County of Middlesex, Esquire, for an invention for—"Improvements iu breech loading guns." *Provisional protection only.*

FORD. PROCTER. 2nd August 1860.

1869. WILLIAM FORD, of Derby, in the County of Derby, Manufacturer, and THOMAS PROCTER, also of Derby, Engineer, for an invention for—"Improvements in sewing-machines." *Provisional protection only.*

MOREL. 2nd August 1860.

1870. AUGUSTE VICTOR MOREL, of Paris, in the French Empire, Merchant, for an invention for—"An improved apparatus for printing in colours textile fabrics and other surfaces." *Provisional protection only.*

NEWTON. 2nd August 1860.

1871. WILLIAM EDWARD NEWTON, of the Office for Patents, 66, Chancery Lane, in the County of Middlesex, Civil Engineer, for an invention for—"Improvements in knitting-machinery."—*A communication to him from abroad by James Green Wilson, of New York City.* *Letters Patent sealed.*

HADDAN. 2nd August 1860.

1872. JOHN COOPE HADDAN, of 14, Bessborough Gardens, Pimlico, in the County of Middlesex, Civil Engineer, for an invention for—"Improvements in the manufacture of rifled cannon and of projectiles to be discharged from rifled cannon." *Letters Patent sealed.*

PITMAN. 3rd August 1860.

1873. JOHN TALBOT PITMAN, of the American and European Patent Offices, No. 67, Gracechurch Street, London, for an invention for—"An improved process in the vulcanization of india-rubber and other similar substances under pressure."—*A communication to him by Messrs. Bourn, Brown & Chaffee, residing abroad in the City of Providence, in the State of Rhode Island, one of the United States of America.* *Letters Patent sealed.*

ARNOLD. 3rd August 1860.

1874. BENJAMIN ARNOLD, of East Greenwich, in the State of Rhode Island, in the United States of America, for an invention for—"Improvements in machinery for netting." *Letters Patent sealed.*

PITMAN. 3rd August 1860.

1875. JOHN TALBOT PITMAN, of the American and European Patent Offices, No. 67, Gracechurch Street, London, for an invention for—"An improved press."—*A communication to him from Messrs. Bourn, Brown & Chaffee, of Providence, in the State of Rhode Island, one of the United States of America, residing abroad.* *Letters Patent sealed.*

HALL. 3rd August 1860.

1876. JOHN HALL, of Blackburn, in the County of Lancaster, Tea Dealer, for an invention for—"Improvements in sewing-machines." *Provisional protection only.*

BILLINGTON. 3rd August 1860.

1877. EDWARD BILLINGTON, of the City of Manchester, in the County of Lancaster, Machinist, for an invention for—"Improvements in machinery or apparatus for combing cotton, wool, flax, tow, silk and other fibrous materials, and in machinery or apparatus for preparing the same to be combed or carded." *Letters Patent sealed.*

KUKLA. 3rd August 1860.

1878. FRANCIS XAVIER KUKLA, of Pentonville Road, in the County of Middlesex, for an invention for—"An improved self regulating gas burner." *Letters Patent sealed.*

HIGGIN. 3rd August 1860.

1879. JAMES HIGGIN, of the City of Manchester, Cotton Merchant, for an invention for—"Improvements in railways, in railway carriages, and in the mode of retarding and stopping railway carriages." *Letters Patent sealed.*

SKIPTON. 3rd August 1860.

1880. SAMUEL STACY SKIPTON, Doctor of Medicine and Assistant Surgeon in Her Majesty's 78th Highland Regiment of Foot, for an invention for—"An improved splint for gunshot and other compound fractures of the limbs." *Letters Patent sealed.*

DE STRADA. 3rd August 1860.

1881. EDOUARD ARMAND Count DE STRADA, of Paris, France, Captain in the French Army, for an invention for—"Improvements in horses' bridles." *Letters Patent sealed.*

NEWTON. 3rd August 1860.

1882. WILLIAM EDWARD NEWTON, of the Office for Patents, 66, Chancery Lane, in the County of Middlesex, Civil Engineer, for an invention for—"A new or improved musical instrument."—*A communication to him from abroad by Clarendon Williams, and E. F. Falconet, of Nashville, Davidson County, State of Tennesse, in the United States of America.* *Letters Patent sealed.*

NEWTON. 3rd August 1860.

1883. WILLIAM EDWARD NEWTON, of the Office for Patents, 66, Chancery Lane, in the County of Middlesex, Civil Engineer, for an invention for—"An improvement in wooden soled boots and shoes or clogs."—*A communication to him from abroad by Marshall Jewell, of the City of Hartford, in the State of Connecticut, and United States of America.* *Letters Patent sealed.*

'NEWTON. 3rd August 1860.

1884. WILLIAM EDWARD NEWTON, of the Office for Patents, 66, Chancery Lane, in the County of Middlesex, Civil Engineer, for an invention for—"Improvements n washing-machines."—*A communication to him from abroad by Henry M. Coombs, and Levi W. Nelson, of Portland, in the County of Multnomah, State of Oregon, in the United States of America.* *Letters Patent sealed.*

CLARK. 3rd August 1860.

1885. WILLIAM CLARK, of 53, Chancery Lane, in the County of Middlesex, Engineer and Patent Agent, for an invention for—"Improvements in embroidering machines."—*A communication to him from abroad by Mr. Alphonse Maureau, Civil Engineer, of Paris, in the Empire of France.* *Provisional protection only.*

STEPHENS. 3rd August 1860.

1886. JOHN STEPHENS, of 3, Augusta Place, Lyncombe Hill, Bath, for an invention for—"Improvements in the arrangement of wheeled carriages to facilitate their movement on soft or uneven land." *Provisional protection only.*

RIVES. 3rd August 1860.

1887. JACQUES RIVES, of No. 15, Rue des Enfants Rouges, Paris, in the Empire of France, for an invention for—"Improvements in looms for weaving, and in preparing cards for the same." *Letters Patent sealed.*

THOMPSON. 3rd August 1860.

1888. EPHRAIM UPHAM THOMPSON, of Bristol, of the State of Maine, of the United States of America, for an invention for—"Improvements in machinery or apparatus to be applied to a shroud, stay or other portion of the rigging of a navigable vessel in order to enable the setting or tightening thereof to be effected and maintained." *Letters Patent sealed.*

BODMER. 4th August 1860.

1889. RUDOLPH BODMER, of 2, Thavies Inn, Holborn, in the City of London, for an invention for—"Improvements in machinery for converting into down or fibres capable of being spun, the remnants or cuttings or other waste pieces of silk or other fabrics."—*A communication to him from abroad by Charles Lewandoski, of Paris, in the Empire of France.* *Complete specification; Letters Patent sealed.*

TAYLOR. PENDLEBURY. BAILEY. HARRELL. 4th August 1860.

1890. WILLIAM TAYLOR, Clerk, JEREMIAH PENDLEBURY, and THOMAS BAILEY, Engineers, and RICHARD HARRELL, all of Preston, in the County of Lancaster, for an invention for—"Improvements in 'temples' used in weaving textile fabrics." *Letters Patent sealed.*

GEDGE. 4th August 1860.

1891. WILLIAM EDWARD GEDGE, of the firm of John Gedge and Son, No. 11, Wellington Street, Strand, in the County of Middlesex, Patent Agent, for an invention for—"An improved cork cutting machine."—*A communication to him from abroad by Barthélemy Belzon, of St. Paul de Fenouillet, Departement des Pyrénées Orientales, France, Engineer.* *Provisional protection only.*

HUNTER. 4th August 1860.

1892. JAMES HUNTER, of Coltness Iron Works, Cambusnethan, in the County of Lanark, North Britain, Ironmaster, for an invention for—"Improvements in machinery or apparatus for boring and winding for mining purposes." *Letters Patent sealed and specification filed by order.*

KLINTIN. 4th August 1860.

1893. JOHAN FREDRIK KLINTIN, of Stockholm, for an invention for—"Improvements in ships' logs." *Letters Patent sealed.*

LANCELOTT. 4th August 1860.

1894. JAMES LANCELOTT, of Rose Terrace, Buxton Road, in the County of Essex, Jeweller, for an invention for—"Improvements in machinery or apparatus for the manufacture of small metallic chains, and also in the manufacture of such chains." *Letters Patent sealed.*

HIGGINS. WHITWORTH. 4th August 1860.

1895. JAMES HIGGINS, of Salford, in the County of Lancaster, Machine Maker, and THOMAS SCHOFIELD WHITWORTH, of the same place, Manager, for an invention for—"Improvement in carding-engines." *Letters Patent sealed.*

WEBB. 4th August 1860.

1896. THOMAS WEBB, of Smallwood Manor, Uttoxeter, in the County of Stafford, Gentleman, for an invention for—"Improvements in gates." *Letters Patent sealed.*

REDGRAVE. 6th August 1860.

1897. WILLIAM REDGRAVE, of 24, Wood Street, Lambeth, in the County of Surrey, Clothier, for an invention for—"An improved inflated undulating artificial bust." *Provisional protection only.*

SEITZ. 6th August 1860.

1898. ADOLPH JULIUS SEITZ, of Newcastle-upon-Tyne, in the County of Northumberland, Chemist, for an invention for—"An improved manufacture of artificial sulphate of baryta."—*A communication to him from abroad by Adolph Seitz, of Gustrow, in Mecklenberg Schwerin.* *Provisional protection only.*

DE MORNAY. 6th August 1860.

1899. HENRY DE MORNAY, of Bayswater, in the County of Middlesex, Gentleman, for an invention for—"Improvements in apparatus for sorting and preparing tea for the market." *Letters Patent sealed.*

JEFFRIES. 6th August 1860.

1900. GEORGE JEFFRIES, of the City of Norwich, Gunmaker, for an invention for—"Improvements in machinery or apparatus for filling cartridges." *Letters Patent sealed.*

SCHWANN. 6th August 1860.

1901. FREDERICK SCHWANN, of No. 4, Gresham Street, in the City of London, for an invention for—"Improvements in dressing and stiffening fabrics and yarns." *Provisional protection only.*

COXON. 7th August 1860.

1902. ROBERT COXON, of Beeston, near Leeds, in the County of York, Manufacturer, for an invention for—"Improvements in hoops or apparatus for giving shape or distention to female attire." *Provisional protection only.*

HUDSON. 7th August 1860.

1903. FREDERIC HUDSON, of No. 227, Blackfriars Road, in the County of Surrey, for an invention for—"Improvements in spring rollers for window blinds." *Letters Patent sealed.*

BONNE. 7th August 1860.

1904. JOSEPH BONNE, Merchant, of Cluis (Indre), Empire of France, for an invention for—"Improvements in furnaces intended to work iron ore." *Letters Patent sealed.*

DAVIES. 7th August 1860.

1905. CHARLES LANGDON DAVIES, of 37, Queen's Square, Bloomsbury, in the County of Middlesex, Gentleman, for an invention for—"Improved apparatus for printing and embossing." *Letters Patent sealed.*

CLARK. 7th August 1860.

1906. WILLIAM CLARK, of 53, Chancery Lane, in the County of Middlesex, Engineer and Patent Agent, for an invention for—"Improvements in pattens or clogs and coverings for the feet."—*A communication to him from abroad by Madame Marie Célina Gobert, née Lebrun, of Paris, in the Empire of France.* *Provisional protection only.*

NEWTON. 7th August 1860.

1907. WILLIAM EDWARD NEWTON, of the Office for Patents, 66, Chancery Lane, in the County of Middlesex, Civil Engineer, for an invention for—"Improved apparatus for retarding carriages."—*A communication to him from abroad by Jules Piault, of Paris, in the Empire of France.* *Provisional protection only.*

BROOMAN. 7th August 1860.

1908. RICHARD ARCHIBALD BROOMAN, of 166, Fleet Street, in the City of London, Patent Agent, for an invention for—"Improvements in mills for grinding corn and other grain."—*A communication to him from abroad by Pierre Eteinne Brisson, of Orleans, France.* *Letters Patent sealed.*

MOSELEY. 8th August 1860.

1909. DAVID MOSELEY, of the Chapel Field Works, Ardwick, in the City of Manchester, Manufacturer of India-rubber and Gutta-percha, for an invention for—"Improvements in the manufacture of hats, caps, bonnets and other coverings for the head, and in machinery connected therewith." *Provisional protection only.*

STEVENS. 8th August 1860.

1910. CHARLES STEVENS, Manager of the British and Foreign Office for Patents No. 1B, Welbeck Street, Cavendish Square, in the County of Middlesex, for an invention for—"An improved plant protector."—*A communication to him from abroad by Jules Romiguière, of 48, Rue Laffite, Paris, in the Empire of France.* *Letters Patent sealed.*

STEVENS. 8th August 1860.

1911. CHARLES STEVENS, Manager of the British and Foreign Office for Patents, No. 1B, Welbeck Street, Cavendish Square, in the County of Middlesex, for an invention for—"An improved mode of binding up brooms, together with the machine used for that purpose."—*A communication to him from abroad by Perrin de Caderousse, of 42, Rue Laffite, Paris, in the Empire of France.* *Letters Patent sealed.*

THORNTON. 8th August 1860.

1912. EDWIN MARTIN THORNTON, of Brooke Street, Holborn, in the County of Middlesex, for an invention for—"An improved rein holder." *Letters Patent sealed.*

WEBSTER. 8th August 1860.

1913. JAMES WEBSTER, of Birmingham, in the County of Warwick, Engineer, for an invention for—"Improvements in the manufacture of prussiate of potash and prussian blue." *Letters Patent sealed.*

BROOMAN. 8th August 1860.

1914. RICHARD ARCHIBALD BROOMAN, of 166, Fleet Street, in the City of London, Patent Agent, for an invention for—"An improved excavating machine for boring tunnels and performing other excavating operations."—*A communication to him from abroad by Messrs. Hippolyte Amédée Buquet, and Raoul Jacques Marie Destrem, of Paris, and Jean Baptiste Valauri, of Turin.* *Letters Patent sealed.*

BROOMAN. 8th August 1860.

1915. RICHARD ARCHIBALD BROOMAN, of 166, Fleet Street, in the City of London, Patent Agent, for an invention for—"Improvements in apparatus for burning gas in carriages, ships and other moving structures."—*A communication to him from abroad by Pierre Hugon, of Paris.* *Letters Patent sealed.*

CRÉTAL. 8th August 1860.

1916. JEAN BAPTISTE CRÉTAL, of Saint Malo, in the Empire of France, Manufacturer, for an invention for—"A new smoking pipe." *Provisional protection only.*

DAVIDSON. 8th August 1860.

1917. FRANCIS DAVIDSON, of Liverpool, in the County of Lancaster, Engineer and Boiler Maker, for an invention for—"Certain improvements in marine steam-engines." *Letters Patent sealed.*

GISBORNE. 8th August 1860.

1918. JOHN SACHEVERELL GISBORNE, of Birkenhead, in the County of Chester, Telegraphic Engineer, for an invention for—"Improvements in apparatus for supporting or carrying electrical conductors for telegraphic communication." *Provisional protection only.*

FIELDING. WHITTAKER. CROASDALE. 8th August 1860.

1919. JAMES FIELDING, Manufacturer, DAVID WHITTAKER, and BENJAMIN CROASDALE, Overlookers, all of Blackburn, in the County of Lancaster, for an invention for—"Improvements in looms for weaving." *Letters Patent sealed.*

HALL. 8th August 1860.

1920. GEORGE HALL Junior, of Montrose, in the County of Forfar, North Britain, Corn Merchant, for an invention for—"Improvements in the form and construction of reaping-machines." *Provisional protection only.*

BARLOW. 8th August 1860.

1921. JOHN BARLOW, of Lauder Street, Saltley, Birmingham, for an invention for—"Improvements in railway signals for communicating with the engine driver, guards and other parties while the train is in motion." *Letters Patent sealed; no specification filed.*

FLOUNDERS. 8th August 1860.

1922. CHARLES FONTAYNE FLOUNDERS, Artist, of Liverpool, Lancaster, for an invention for—"An improvement or improvements in duplicating photographic impressions, and also for certain machinery for the same." *Letters Patent sealed.*

DODDS. 8th August 1860.

1923. MATTHEW DODDS, of Bedburn Iron Works, in the Parish of Hamsterley, in the County of Durham, Edge Tool Manufacturer, for an invention for—"Improvements in machinery for moulding, forming or shaping articles of iron and other malleable metals, and for shearing or cutting iron and other metals." *Letters Patent sealed.*

SMITH. 8th August 1860.

1924. ELLISON SMITH, of Keighley, in the County of York, Mechanic, for an invention for—"Improvements in machinery for preparing wool, cotton, flax and other fibrous materials for spinning." *Letters Patent sealed.*

NEWTON. 8th August 1860.

1925. ALFRED VINCENT NEWTON, of the Office for Patents, 66, Chancery Lane, in the County of Middlesex, Mechanical Draughtsman, for an invention for—"Improvements in the mode of and apparatus for superheating steam."—*A communication to him from abroad by Solomon Nunes Caravalho, of the City of Baltimore, in the United States of America.* *Letters Patent sealed.*

NEWTON. WILD. 8th August 1860.

1926. GEORGE HENRY NEWTON, of Oldham, in the County of Lancaster, Mechanic, and ABRAHAM WILD, of the same place, Cotton Spinner, for an invention for—"Improvements in mules for spinning and doubling." *Letters Patent sealed.*

GRIMALDI. 9th August 1860.

1927. Doctor FILIPPO GRIMALDI, of Teramo, in the Kingdom of Naples, but now residing at 26, Great Prescot Street, in the City of London, for an invention for—"Improvements in the instantaneous generation of steam." *Letters Patent sealed.*

EARLE. EARLE. 9th August 1860.

1928. HENRY EARLE, and WILLIAM EARLE, of Hereford, in the County of Hereford, for an invention for—"An improvement in connecting skins or sheets of parchment, vellum or paper together, and in attaching seals to deeds and other instruments." *Letters Patent sealed.*

COCKEY. COCKEY. 9th August 1860.

1929. HENRY COCKEY, and FRANCIS CHRISTOPHER COCKEY, of the Frome Iron Foundry, in the County of Somerset, Engineers, for an invention for—"Improvements in driving chaff and root cutters and other agricultural machines." *Letters Patent sealed.*

NEUMANN. 9th August 1860.

1930. ANTON NEUMANN, of 4, Pancras Lane, in the City of London, Merchant, for an invention for—"Improvements in the treatment of food for cattle, and in machinery or apparatus employed therein."—*A communication to him from abroad by Franz Xavier Kientzle, and Joseph Reiss, both of Colmar, in the Empire of France.* ***Provisional protection only.***

NEUMANN. 9th August 1860.

1931. ANTON NEUMANN, of 4, Pancras Lane, in the City of London, Merchant, for an invention for—"Improvements in the hanging and fastening of doors, lids and other hinged covers."—*A communication to him from abroad by Franz Xavier Kientzle, of Colmar, in the Empire of France, Mechanician.*

Provisional protection only.

MAUVILLIN. 9th August 1860.

1932. PIERRE MAUVILLIN, of Paris, in the French Empire, Merchant, for an invention for—"An improved sewing and embroidering machine."

Provisional protection only.

EDDINGTON. 9th August 1860.

1933. ALFRED EDDINGTON, of Springfield, Chelmsford, in the County of Essex, for an invention for—"Improvements in draining ploughs."

Provisional protection only.

PARKER. 9th August 1860.

1934. FRANCIS PARKER, of Wood Street, Northampton, in the County of Northampton, Boot and Shoe Manufacturer, for an invention for—"Improved coverings for the feet or parts thereof, suitable more especially as foot warmers for railway and other travellers." *Provisional protection only.*

NEWTON. 9th August 1860.

1935. ALFRED VINCENT NEWTON, of the Office for Patents, 66, Chancery Lane, in the County of Middlesex, Mechanical Draughtsman, for an invention for—"An improvement in ventilating buildings, vessels and mines."—*A communication to him from abroad by Sidney Mason Stone, of the City of New Haven, State of Connecticut, United States of America.* *Letters Patent sealed.*

UNDERWOOD. 10th August 1860.

1936. JOSEPH UNDERWOOD, of Birmingham, in the County of Warwick, Manufacturer, for an invention for—"An improvement or improvements in dressing cases and writing cases." *Provisional protection only.*

STEVENS. 10th August 1860.

1937. CHARLES STEVENS, Manager of the British and Foreign Office for Patents, No. 1B, Welbeck Street, Cavendish Square, in the County of Middlesex, for an invention for—"Improvements in boilers."—*A communication to him from abroad by Jean Carrère, of No. 42, Rue Laffite, Paris, in the Empire of France.*

Provisional protection only.

CRAWFORD. 10th August 1860.

1938. JOHN CRAWFORD, of Manchester, in the County of Lancaster, Manager to Messrs. James and Wainwright Bellhouse, of the same place, Cotton Spinners, for an invention for—"A certain improvement in machinery or apparatus for spinning cotton and other fibrous substances." *Provisional protection only.*

SUMMERSCALES 10th August 1860.

1939. JOHN SUMMERSCALES, of Coney Lane Mills, in Keighley, in the County of York, Machinist, for an invention for—"Improvements applicable to churns, washing and mangling machines, dough kneading machines, and mixing machines."

Provisional protection only.

ENKLAAR. 10th August 1860.

1940. FREDERIK ANDRIAAN ENKLAAR, of Hattem, in the Kingdom of Holland, Agriculturalist, for an invention for—"Improvements in implements for cultivating the soil." *Provisional protection only.*

PLUM. 10th August 1860.

1941. THOMAS WILLIAM PLUM, of Blaenavon Iron Works, in the County of Monmouth, Iron Master, for an invention for—"Improvements in fixing tyres upon wheels and chairs upon sleepers, part of which is applicable to rivetting generally."

Provisional protection only.

MIDDLETON. 10th August 1860.

1942. SAMUEL MIDDLETON, of 15, White Friars Street, in the City of London, Mechanic, for an invention for—"Improvements in combining and preparing surfaces of paper and other materials for the purpose of preventing forgery or fraud in the manufacture of bank notes, cheques, bills of exchange or other valuable documents."

Provisional protection only.

GILES. 10th August 1860.

1943. JOHN GILES, of No. 8, Cannon Street, London, for an invention for—"Improvements in steam-engines and in steam generators." *Letters Patent sealed.*

DE BERGUE. 11th August 1860.

1944. CHARLES DE BERGUE, of No. 9, Dowgate Hill, in the City of London, Engineer, for an invention for—"Improvements in the permanent way of railways."

Provisional protection only.

SMITH. 11th August 1860.

1945. RICHARD SMITH, of 114, West Street, in the City of Glasgow, in Scotland, Manufacturing Chemist, for an invention for—"Improvements in the manufacture of coloring matters for dyeing and printing fabrics." *Letters Patent sealed.*

WILKINS. 11th August 1860.

1946. JOHN WILKINS, Commercial Clerk, of No. 18, Essex Street, St. Peter's, Islington, in the County of Middlesex, for an invention for—"An improved ink-stand." *Letters Patent sealed.*

PHILLIPS. 11th August 1860.

1947. RICHARD PHILLIPS, of Wavertree, near Liverpool, in the County of Lancaster, Merchant, for an invention for—"Improvements in harvesting machines."—*A communication to him from abroad by Mr. Jesse Whitehead, of Manchester, in the County of Chesterfield, and State of Virginia, one of the United States of America.* *Provisional protection only.*

HOLLAND. 11th August 1860.

1948. HENRY HOLLAND, of Birmingham, in the County of Warwick, Manufacturer, for an invention for—"An improvement or improvements in the manufacture of umbrellas and parasols." *Provisional protection only.*

COTTERELL. 11th August 1860.

1949. HENRY COTTERELL, of Balsall Heath, King's Norton, in the County of Worcester, Manager of Works, for an invention for—"Improvements in the manufacture of umbrellas and parasols." *Letters Patent sealed.*

HART. 11th August 1860.

1950. THOMAS HART, of Northampton, for an invention for—"An improved brick-making machine." *Letters Patent sealed.*

POUSSIER. 13th August 1860.

1951. CONSTANT PIERRE ELEONORE POUSSIER, of Paris, France, Manufacturing Chemist, for an invention for—"Improvements in the manufacture or alcaline or other bichromates." *Letters Patent sealed.*

ORANGE. 13th August 1860.

1952. EMMA BENJAMIN ORANGE, residing at Barentin, in the Depart[t] of Seine Inferieure, in the Empire of France, for an invention for—"An improved method of and apparatus for unloosening horses instantly from a carriage, when frightened or running away." *Provisional protection only.*

STODART. BENETT. 13th August 1860.

1953. JAMES STODART, of Walworth, in the County of Surrey, Gentleman, and JOHN THOMAS BENETT, of Dalston, in the County of Middlesex, Master Mariner, for an invention for—"Improvements in ships' propellers." *Provisional protection only.*

NORRIS. ROGERS. 13th August 1860.

1954. STEPHEN NORRIS, of Great Peter Street, in the City of Westminister, and ROBERT ROGERS, of King Street, Covent Garden, in the County of Middlesex, for an invention for—"Improvements in the manufacture of boots particularly adapted to military purposes." *Letters Patent sealed.*

HEWETSON. 13th August 1860.

1955. HENRY HEWETSON, of Blackheath, in the County of Kent, Merchant, for an invention for—"Improvements in rockets and in apparatus for discharging the same." *Letters Patent sealed.*

STUART. 13th August 1860.

1956. JAMES STUART, of Vulcan Place, Castor Street, Poplar, in the County of Middlesex, for an invention for—"Improvements in treating hydro-carbon oils." *Letters Patent sealed.*

NEWTON. 13th August 1860.

1957. ALFRED VINCENT NEWTON, of the Office for Patents, 66, Chancery Lane, in the County of Middlesex, Mechanical Draughtsman, for an invention for—"An improved mode of treating waste vulcanized india-rubber."—*A communication to him from abroad by John Haven Cheever, of New York, in the United States of America.* *Letters Patent sealed.*

GREENWOOD. 13th August 1860.

1958. THOMAS GREENWOOD, of Leeds, in the County of York, Machinist, for an invention for—"Improvements in the construction of projectiles." *Letters Patent sealed.*

NEWTON. 13th August 1860.

1959. ALFRED VINCENT NEWTON, of the Office for Patents, 66, Chancery Lane, in the County of Middlesex, Mechanical Draughtsman, for an invention for—"Improvements in the mode of and machinery for manufacturing hose pipe."—*A communication to him from abroad by John Haven Cheever, of New York, in the United States of America.* *Letters Patent sealed.*

NEWTON. 13th August 1860.

1960. ALFRED VINCENT NEWTON, of the Office for Patents, 66, Chancery Lane, in the County of Middlesex, Mechanical Draughtsman, for an invention for—"Improvements in the mode of and apparatus for manufacturing packing for pistons and other parts of machinery."—*A communication to him from abroad by John Haven Cheever, of New York, in the United States of America.* *Letters Patent sealed.*

NEWTON. 13th August 1860.

1961. ALFRED VINCENT NEWTON, of the Office for Patents, 66, Chancery Lane, in the County of Middlesex, Mechanical Draughtsman, for an invention for—"Improvements in the manufacture of driving bands and in the machinery to be employed in such manufacture."—*A communication to him from abroad by John Haven Cheever, of New York, in the United States of America.* *Letters Patent sealed.*

LESLIE. 14th August 1860.

1962. GEORGE LESLIE, of The Mall, Hammersmith, in the County of Middlesex, Esquire, for an invention for—"Improvements in preserving casks and apparatus connected therewith." *Provisional protection only.*

BILLING. 14th August 1860.

1963. JOHN BILLING, of Abingdon Street, Westminster, in the County of Middlesex, Architect, for an invention for—"Improvements in chimney tops." *Letters Patent sealed.*

REED. 14th August 1860.

1964. JAMES REED, of Limehouse, in the County of Middlesex, Pianoforte Maker, for an invention for—"Improvements in pianofortes." *Provisional protection only.*

WEHNERT. 14th August 1860.

1965. NICHOLAS WEHNERT, of 3, King Street, Cheapside, in the City of London, for an invention for—"Improvements in the consumption of fuel, in superheating steam, and in the apparatus employed therefor."—*A communication to him from abroad by Paul Trochon, of 20, Rue Buffaut, Paris.* *Letters Patent sealed.*

LARK. 14th August 1860.

1966. JAMES LARK, of Strood, in the County of Kent, for an invention for—"Improvements in grinding cement and other substances, and in the machinery or apparatus connected therewith." *Letters Patent sealed.*

FIELD. JEFFREYS. 14th August 1860.

1967. WILLIAM FIELD, and EDWARD JEFFREYS, both of Shrewsbury, in the County of Salop, Gentlemen, for an invention for—"Improvements in the permanent way of railways." *Letters Patent sealed.*

WROUGHTON. HOLMES. 14th August 1860.

1968. EDWARD WROUGHTON, and THOMAS HOLMES, both of the Town and County of the Town of Nottingham, Lace Manufacturers, for an invention for—"Improvements in machinery for ornamenting or embossing lace or other fabrics." *Letters Patent sealed.*

M^cKIBBIN. 14th August 1860.

1969. ROBERT DICKSON M^cKIBBIN, of Earl Street, Blackfriars, in the City of London, for an invention for—"An improved water proof and noninflammable material applicable to roofing and to other purposes for which felt, tarpauling, oil cloth, and such like materials are now used." *Letters Patent sealed.*

FAURE. 15th August 1860.

1970. PIERRE FAURE, of the Town of Avignon, in the Department of the Vaucluse, in the Empire of France, Treasurer of the Seminary of Avignon, aforesaid, for an invention for—"A centrifugal hydraulic pump." *Provisional protection only.*

COURTOT. 15th August 1860.

1971. HIPPOLYTE COURTOT, Mechanician, of Reims, Marne, Empire of France, for an invention for—"An improved machine with a drawer and moveable knife used to part and break sugar." *Letters Patent sealed.*

JENKINSON. SOLBÉ. 15th August 1860.

1972. WILLIAM JENKINSON, of Bentley, near Doncaster, in the County of York, and ALFRED SOLBÉ, of Leadenhall Street, in the City of London, for an invention for—"Improvements in the connections or joints of the posts and frames of bedsteads and iron houses." *Letters Patent sealed.*

BARLOW. 15th August 1860.

1973. HENRY BERNOULLI BARLOW, of the City of Manchester, Patent Agent, for an invention for—"Improvements in the manufacture or preparation of indigo."—*A communication to him from abroad by Messieurs Breslauer, Meyer and Company, of Berlin, in the Kingdom of Prussia.* *Provisional protection only.*

LELY. 15th August 1860.

1974. AFFIFI LELY, of Redditch, in the County of Worcester, Engineer and Machinist, for an invention for—"New or improved machinery for grooving sewing-machine needles." *Letters Patent sealed.*

DOIDI. 15th August 1860.

1975. GABRIEL DOIDI, Half Moon Hotel, 131, High Street, Borough, Southwark, in the County of Surrey, for an invention for—"Improvements in the preservation of meats." *Provisional protection only.*

HOLMS. OLDFIELD. 15th August 1860.

1976. WILLIAM HOLMS, of Glasgow, in the County of Lanark, North Britain, Manufacturer, and JABEZ OLDFIELD, of the same place, Foreman Weaver, for an invention for—"Improvements in machinery or apparatus for weaving." *Letters Patent sealed.*

GAGE. 15th August 1860.

1977. GEORGE GAGE, of Luton, in the County of Bedford, Chemist, for an invention for—"Improvements in the colouring and manufacture of straw plaits." *Provisional protection only.*

GODEFROY. 15th August 1860.

1978. PETER AUGUSTIN GODEFROY, of No. 3, King's Mead Cottages, New North Road, in the County of Middlesex, Operative Chemist, for an invention for—"Improvements in the mode of insulating and laying down inland telegraphic wire." *Letters Patent sealed.*

WALTON.
15th August 1860.

1979. WILLIAM WALTON, of Haughton Dale, Denton, near Manchester, for an invention for—"Improvements in the manufacture of wire cards and in machinery used therein." *Letters Patent sealed.*

GREEN.
ASBURY.
15th August 1860.

1980. CHARLES GREEN, of Birmingham, Patent Tube Manufacturer, and WILLIAM ASBURY, also of Birmingham, Engineer, for an invention for—"Improvements in machinery for manufacturing tubes for tubular steam-boilers." *Letters Patent sealed.*

FRYER.
15th August 1860.

1981. ALFRED FRYER, of Manchester, in the County of Lancaster, Sugar Refiner, for an invention for—"Improvements in centrifugal machines." *Letters Patent sealed.*

SAMUEL.
TRAIN.
15th August 1860.

1982. JAMES SAMUEL, of Great George Street, in the City of Westminster, Civil Engineer, and GEORGE FRANCIS TRAIN, of Liverpool, in the County of Lancaster, Merchant, for an invention for—"Improvements in rails for streets and roads, and in wheels and axles to be used thereon." *Letters Patent sealed.*

BLUZAT.
RIVIÈRE.
BLUZAT.
MAIGRON.
15th August 1860.

1983. JEAN BLUZAT, MARCELIN RIVIÈRE, CLAUDE BLUZAT, and FREDERIC MAIGRON, of Marseille, Town in the French Empire, for an invention for—"Improved machinery or apparatus for obtaining and applying motive-power." *Provisional protection only.*

BENTLEY.
BENTLEY.
16th August 1860.

1984. JOSEPH BENTLEY, of Liverpool, in the County of Lancaster, Gun Manufacturer, and DAVID BENTLEY, of Birmingham, in the County of Warwick, Gun Manufacturer, for an invention for—"Improvements in breech-loading fire-arms." *Provisional protection only*

PETRIE.
16th August 1860.

1985. WILLIAM PETRIE, of Woolwich, in the County of Kent, Chemist, for an invention for—"Improvements in the manufacture of sulphuric acid and in apparatus employed therein, parts of which improvements are applicable to the obtaining of draught to the condensing of gases, and to the constructing of flues." *Letters Patent sealed.*

GRUNDT.
16th August 1860.

1986. HERRMANN GRUNDT, of St. Louis, in the United States of America, Merchant, for an invention for—"Improvements in pontoons." *Provisional protection only.*

MELLODEW.
KESSELMEYER.
16th August 1860.

1987. THOMAS MELLODEW, of Oldham, in the County of Lancaster, Manufacturer, and CHARLES WILLIAM KESSELMEYER, of Manchester, in the said County, Warehouseman, for an invention for—"Improvements in the manufacture of velvets and velveteens." *Letters Patent sealed.*

COLEMAN.
16th August 1860.

1988. JOSEPH JAMES COLEMAN, of Holly Royd, in the Parish of Halifax, in the County of York, Professor of Chemistry, for an invention for—"Improvements in the manufacture of colouring matters for dyeing and printing." *Letters Patent sealed.*

ATKINSON.
17th August 1860.

1989. CHARLES FANSHAWE ATKINSON, of Sheffield, in the County of York, Steel Manufacturer, for an invention for—"The application of steel or iron to the manufacture of collars and wristbands to be worn as articles of clothing." *Provisional protection only.*

SMITH.
17th August 1860.

1990. RICHARD SMITH, of No. 114, West Street, in the City of Glasgow, in Scotland, Manufacturing Chemist, for an invention for—"Improvements in the preparation and production of coloring matter." *Letters Patent sealed.*

MOLE.
MOLE.
17th August 1860.

1991. ROBERT MOLE, of Birmingham, in the County of Warwick, Manufacturer, and FREDERICK MAJOR MOLE, of Birmingham, aforesaid, Manufacturer, for an invention for—"An improvement or improvements in the manufacture of matchets and cutlasses." *Letters Patent sealed*

WARDLE.
17th August 1860.

1992. JAMES WARDLE, of Bury, in the County of Lancaster, Bricklayer, for an invention for—"Certain improved arrangements of the flues of steam-boilers." *Provisional protection only*

MIDDLETON.
FOX.
17th August 1860.

1993. WILLIAM MIDDLETON, of Glossop, in the County of Derby, Paper Manufacturer, and DANIEL FOX, of the same place, Manager, for an invention for—"Improvements in machinery or apparatus for making paper." *Provisional protection only.*

NEAME. 17th August 1860.

1994. JOHN AUSTIN NEAME, Patent Iron Spring Bedstead Manufacturer, 157, Sloane Street, Chelsea, for an invention for—"Improvements in machinery for manufacturing solid, hollow or perforated bricks, socket and other pipes." *Provisional protection NOT granted.*

NIMMO. 17th August 1860.

1995. GEORGE NIMMO, of Glasgow, in the County of Lanark, North Britain, Steel Manufacturer, for an invention for—"Improvements in the manufacture of steel." *Letters Patent sealed; no specification filed.*

READ. 17th August 1860.

1996. ROBERT READ, the younger, of Havelock Street, in the Borough of Leicester, Waterproof Fabric Manufacturer, for an invention for—"Improvements in the manufacture of water proof fabrics permeable to air." *Letters Patent sealed.*

PIROTTE. 17th August 1860.

1997. ALPHONSE PIROTTE, of Liège, in the Kingdom of Belgium, Engineer, for an invention for—"Improvements in the construction of condensers." *Letters Patent sealed.*

GARNETT. 17th August 1860.

1998. JOHN GARNETT, of Windermere, in the County of Westmorland, Printer and Stationer, for an invention for—"Improvements in writing desks and in apparatus connected therewith." *Letters Patent sealed.*

TEMPEST. TOMLINSON. 18th August 1860.

1999. ROBERT TEMPEST, and JAMES TOMLINSON, both of the Roach Iron Works, Rochdale, in the County of Lancaster, Machine Makers, for an invention for—"Improvements in certain machines for preparing cotton and other fibrous materials." *Letters Patent sealed.*

FOXWELL. 18th August 1860.

2000. DANIEL FOXWELL, of the City of Manchester, in the County of Lancaster, Card Manufacturer, for an invention for—"Improvements in sewing-machines." *Letters Patent sealed.*

CRISPIN. 18th August 1860.

2001. WILLIAM HENRY CRISPIN, of Marsh Gate Lane, Stratford, in the County of Essex, Copper Smelter, for an invention for—"An improved propeller." *Letters Patent sealed.*

TIDCOMBE. 18th August 1860.

2002. GEORGE TIDCOMBE, of Watford Iron Works, in the County of Hertford, Engineer and Millwright, for an invention for—"Improvements in hydrostatic presses." *Provisional protection only.*

ROMAINE. 18th August 1860.

2003. ROBERT ROMAINE, of Devizes, in the County of Wilts, Gentleman, for an invention for—"Improved machinery applicable to steam cultivation." *Letters Patent sealed.*

HOUGHTON. 18th August 1860.

2004. FREDERICK BURNETT HOUGHTON, of 12, Eldon Road, Kensington, in the County of Middlesex, for an invention for—"Improvements in the manufacture of paper when the straw of wheat, barley, oats, rye or rice is employed." *Letters Patent sealed.*

GRAHAME. 18th August 1860.

2005. THOMAS GRAHAME, of Leamington, in the County of Warwick, for an invention for—"Improvemeuts in projectiles and cannons or barrels for discharging the same." *Letters Patent sealed.*

BOOTT. 20th August 1860.

2006. JAMES BOOTT, of Lille Town, in the French Empire, Manufacturer, for an invention for—"Improvements in the manufacture of various weavings in bobbin net, and in machinery for the same." *Provisional protection only.*

NEWTON. 20th August 1860.

2007. ALFRED VINCENT NEWTON, of the Office for Patents, 66, Chancery Lane, in the County of Middlesex, Mechanical Draughtsman, for an invention for—"An improved guard for boots, shoes and clogs."—*A communication to him from abroad by William Andrew Harris, of Providence, Rhode Island, in the United States of America.* *Letters Patent sealed.*

NEWTON. 20th August 1860.

2008. ALFRED VINCENT NEWTON, of the Office for Patents, 66, Chancery Lane, in the County of Middlesex, Mechanical Draughtsman, for an invention for—"An improved mode of coupling the rails of railways."—*A communication to him from abroad by Joseph M. Heard, of Prarie Station, Monroe County, State of Mississippi, United States of America.* *Provisional protection only.*

BRIDGMAN. 20th August 1860.

2009. EDWARD BRIDGMAN, of Tarragona, in the Kingdom of Spain, Gentleman, for an invention for—"Improvements in the construction of wet gas meters." *Letters Patent sealed.*

GREAVES.
21st August 1860.

2010. HUGH GREAVES, of 7, Besborough Gardens, Pimlico, in the County of Middlesex, Gentleman, for an invention for—"Improvements in the construction of railways, tramways or tracks for carriages, and in the appliances for the conveyance of passengers, parcels and letters thereby." *Provisional protection only.*

NEAL.
21st August 1860.

2011. JOHN NEAL, of Birmingham, in the County of Warwick, Dentist, for an invention for—"A new or improved mixture or composition for fumigating plants and thereby destroying insects infesting the said plants." *Letters Patent sealed.*

GEDGE.
21st August 1860.

2012. WILLIAM EDWARD GEDGE, of the firm of John Gedge and Son, of No. 11 Wellington Street Strand, in the County of Middlesex, Patent Agent, for an invention for—"Improvements in apparatus for obtaining motive-power based upon the hydrostatic paradox."—*A communication to him from abroad by Louis Leygonie, of Limoges, France, Geologist.* *Provisional protection only.*

CAMPBELL.
21st August 1860.

2013. JAMES CAMPBELL, of No. 44, Adelaide Road, Haverstock Hill, in the County of Middlesex, Civil Engineer, for an invention for—"Improvements in apparatus for removing sand or mud from the bottom of the sea and of rivers, docks and harbours." *Letters Patent sealed.*

WILSON.
HACKER.
21st August 1860.

2014. CHARLES EDMUND WILSON, Manufacturer, and HENRY GEORGE HACKER, Warehouseman, both of Monkwell Street, in the City of London, for an invention for—"Improvements in machinery for the manufacture of chenille." *Letters Patent sealed.*

HALL.
21st August 1860.

2015. EDWARD HALL, of Dartford, in the County of Kent, for an invention for —"Improvements in machinery for grinding and smoothing glass." *Letters Patent sealed.*

JACOBY.
21st August 1860.

2016. MORITZ JACOBY, of Nottingham, for an invention for—"Improvements in the manufacture of twist lace in twist lace or bobbin net machinery." *Letters Patent sealed.*

PERKINS.
21st August 1860.

2017. ANGIER MARCH PERKINS, of Francis Street, Regent Square, Gray's Inn Road, in the County of Middlesex, for an invention for—"Improvements in apparatus for distilling sea and other water." *Letters Patent sealed.*

WEST.
22nd August 1860.

2018. ROBERT WEST, of Walsall, in the County of Stafford, Gas Engineer, for an invention for—"Improvements in the construction of wet gas meters." *Letters Patent sealed.*

CLARKE.
22nd August 1860.

2019. HENRY MARTYN CLARKE, of Boston, of the State of Massachusetts, of the United States of America, for an invention for—"An improved machine for grinding or reducing paper stuff to pulp and sizing the same."—*A communication to him by Joseph Jordan, Jr, resident at Hartford, of the State of Connecticut.* *Complete specification; Letters Patent sealed.*

JOBIN.
BOLL.
22nd August 1860.

2020. JOSEPH JOBIN, of Robert Street, Chelsea, in the County of Middlesex, and AUGUSTE BOLL, of the same place, for an invention for—"Improvements in cigarettes and mouthpieces, and in apparatus used in manufacturing cigarettes." *Provisional protection only.*

DANA.
22nd August 1860.

2021. EDWARD AUGUSTUS DANA, of the State of Massachusetts, of the United States of America, for—"An invention relating to ordnance as well as fire-arms."—*A communication to him by John P. Schenkl, resident at Boston, in the said State of Massachusetts.* *Complete specification; Letters Patent sealed.*

GRUMEL.
22nd August 1860.

2022. FRANÇOIS REMY GRUMEL, of 333, Saint Martin Street, Paris, in the Empire of France, and of 42, Bridge Street, Blackfriars, London, for an invention for —"Improvements in the albums of collection of photographic and lithographic proofs, engravings, and other drawings." *Letters Patent sealed.*

CLARK.
22nd August 1860.

2023. WILLIAM CLARK, of 53, Chancery Lane, in the County of Middlesex, Engineer and Patent Agent, for an invention for—"Improvements in the preparation or manufacture of manure."—*A communication to him from abroad by Messrs. Louis Joseph Frédéric Margueritte, Chemist, and Alfred Lalouël de Sourdeval, Proprietor, both of Paris.* *Provisional protection only.*

CORBETT.
SMITH.
23rd August 1860.

2024. JOSEPH CORBETT, and ROBERT SMITH, of 15, Elizabeth Terrace, Spencer Road, Hornsey New Town, Stoke Newington, in the County of Middlesex, for an invention for—"An improved portable circular crane, applicable also as a fire escape." *Provisional protection only.*

NEWHOUSE. 23rd August 1860.

2025. JAMES NEWHOUSE, of Farnworth, near Bolton-le-Moors, in the County of Lancaster, Manager, for an invention for—"Improvements in or applicable to certain machines for spinning and doubling cotton and other fibrous materials." *Letters Patent sealed.*

COLE. 23rd August 1860.

2026. RICHARD JOHN COLE, of No. 21, Craepstow Villas West, Bayswater, in the County of Middlesex, Esquire, for an invention for—"Improvements in the construction of brushes." *Letters Patent sealed.*

WHITEHOUSE. 23rd August 1860.

2027. EDWARD ORANGE WILDMAN WHITEHOUSE, of Brighton, in the County of Sussex, Electrician, for an invention for—"Improvements in testing insulated conductors." *Letters Patent sealed.*

PURCHAS. 23rd August 1860.

2028. SAMUEL PURCHAS, Civil Engineer, of the City and County of Worcester' for an invention for—"Certain improvements in the application of brakes to railway carriages."—*A communication to him from abroad by Albert Purchas, Civil Engineer, of Melbourne, in the Colony of Victoria, Australia.* *Letters Patent sealed.*

CANNON. JACKSON. 23rd August 1860.

2029. WILLIAM WALTER CANNON, of Bolton, in the County of Lancaster, Cotton Spinner, and ROBERT JACKSON, of the same place, Manager, for an invention for—"Certain improvements in machinery or apparatus for spinning cotton and other fibrous substances." *Provisional protection only.*

LILLIE. 23rd August 1860.

2030. Sir JOHN SCOTT LILLIE, Companion of the Most Honorable Order of the Bath, of No. 105, Pall Mall, in the County of Middlesex, for an invention for —"Improvements in blocks for building purposes." *Letters Patent sealed.*

WEISS. 23rd August 1860.

2031. CHARLES WEISS, of Huddersfield, Merchant, for an invention for—"Improvements in the manufacture of cloth and in preparing and cleaning woollen flock."—*A communication to him from abroad by Frederick Samuel Brittan, of Murray Street, New York.* *Letters Patent sealed.*

SPENCE. 23rd August 1860.

2032. WILLIAM SPENCE, of 50, Chancery Lane, in the County of Middlesex, Patent Agent, for an invention for—"Improvements in padlocks and keys for the same."—*A communication to him from abroad by Solomon Andrews, of Perth, Amboy, in the County of Middlesex, and State of New Jersey, and Thomas Morrell, of the City, County, and State of New York.* *Letters Patent sealed.*

LACROISADE. 23rd August 1860.

2033. JEAN HECTOR CHAMBON LACROISADE, Gentleman, of Paris, in the Empire of France, No. 33, B^ard St. Martin, for an invention for—"An improved apparatus for heating tailors' irons and other irons, also for cooking and other heating purposes, with irons adapted to be used therewith." *Letters Patent sealed.*

BEALEY. 24th August 1860.

2034. RICHARD ROME BEALEY, of the City of Manchester, in the County of Lancaster, Shirt Front Manufacturer, for an invention for—"Improvements in shirt-fronts." *Letters Patent sealed.*

GEDGE. 24th August 1860.

2035. WILLIAM EDWARD GEDGE, of the firm of John Gedge and Son, 11, Wellington Street, Strand, in the County of Middlesex, Patent Agent, for an invention for—"Improvements in turbinical hydraulic apparatus."—*A communication to him from abroad by Jean Larger, of Felleringen, Department of the Haute Rhin, France, Weaver and Spinner.* *Letters Patent sealed.*

KEEN. 24th August 1860.

2036. WILLIAM KEEN, of Horton, near Slough, in the County of Buckingham, for an invention for—"Improvements in castors." *Provisional protection only.*

PRITTY. 24th August 1860.

2037. HENRY PRITTY, of 6, Victoria Grove West, Brompton, in the County of Middlesex, for an invention for—"Improvements in apparatus used to damp paper for copying letters and other documents." *Provisional porotection only.*

HALTER. DECORCE. 24th August 1860.

2038. ANTOINE HALTER, and FRANÇOISE DECORCE, Widow DOUARD, of 91, Rue de Malte, Paris, in the Empire of France, for an invention for—"Improvements in the manufacture of flexible tubes for the conveyance of water, illuminating gas or other fluids." *Letters Patent sealed.*

GREENWOOD. 24th August 1860.

2039. STEPHEN GREENWOOD, of Butterfield Place, Cropper Lane, Bradford, in the County of York, Overlooker, for an invention for—"Certain improvements in looms for figure weaving." *Letters Patent sealed.*

LAMBE. 24th August 1860.

2040. FREDERICK LAMBE, of Cushion Court, Old Broad Street, in the City of London, for an invention for—"Improvements in the construction of certain parts of oil lamps and other lamps."—*A communication to him from abroad by Henry Coulter, of Philadelphia, in the United States of America.* *Provisional protection only.*

BARCLAY.
24th August 1860.

2041. ANDREW BARCLAY, of Kilmarnock, in the County of Ayr, North Britain, Engineer, for an invention for—"Improvements in pumping engines."
Provisional protection only.

FLEMING.
24th August 1860.

2042. JAMES FLEMING, Junior, of Newlandsfields, in the County of Renfrew, North Britain, Bleacher, for an invention for—"Improvements in washing, cleansing and preparing textile fabrics and materials, and in the machinery or apparatus employed therein." *Letters Patent sealed.*

VAN DEN OUWELANT.
24th August 1860.

2043. FERDINAND PIERRE JEAN VAN DEN OUWELANT, of Paris, France, Gentleman, for an invention for—"Improvements in apparatus to be applied to fire-places for obtaining absorption of the smoke and a better combustion of the fuel employed therein." *Letters Patent sealed.*

CLARK.
24th August 1860.

2044. WILLIAM CLARK, of 53, Chancery Lane, in the County of Middlesex, Engineer and Patent Agent, for an invention for—"Improvements in apparatus used in reproducing designs in tapestry or wool work."—*A communication to him from abroad by Mr. Charles Louis Roguier, of Paris, in the Empire of France, Merchant.*
Letters Patent sealed.

RÉVY.
24th August 1860.

2045. JULIAN JOHN RÉVY, of York Street, Portman Square, in the County of Middlesex, Civil Engineer, for an invention for—"An improved construction of screw propeller." *Letters Patent sealed.*

KERSHAW.
24th August 1860.

2046. GEORGE KERSHAW, of Upton Cottage, Slough, in the County of Bucks, Stationer, for an invention for—"Improvements in the construction of medico-electric surfaces." *Letters Patent sealed; specification filed by order.*

THOMSON.
JENKIN.
25th August 1860.

2047. WILLIAM THOMSON, Doctor of Laws, Professor of Natural Philosophy in the University and College of Glasgow, in the County of Lanark, and FLEMING JENKIN, of Stowting, in the County of Kent, Civil Engineer, for an invention for—"Improvements in the means of telegraphic communication." *Letters Patent sealed.*

DAVIES.
25th August 1860.

2048. GEORGE DAVIES, of No. 1, Serle Street, Lincoln's Inn, in the County of Middlesex, and No. 28, St. Enoch Square, in the City of Glasgow, Civil Engineer and Patent Agent, for an invention for—"Certain improvements in the construction of bomb shells."—*A communication to him from abroad by William Rice, of Philadelphia, in the United States of America.* *Letters Patent sealed.*

DE BARAN.
25th August 1860.

2049. FERDINAND GABRIEL MIGEOT DE BARAN, of Paris, in the Empire of France, Gentleman, for an invention for—"An improved method of stopping bottles or other vessels for containing gaseous liquids."
Complete specification; Letters Patent sealed.

NEWALL.
25th August 1860.

2050. JONATHAN NEWALL, of Dukinfield, in the County of Cheshire, Painter, &c., for an invention for—"Certain improvements in apparatus for 'transferring' the latent heat of steam to water or other fluids." *Letters Patent sealed.*

WILKES.
WILKES.
WILKES.
25th August 1860.

2051. JOHN WILKES, of Birmingham, in the County of Warwick, Manufacturer, and THOMAS WILKES, of Birmingham, aforesaid, Manufacturer, and GILBERT WILKES, of Birmingham, aforesaid, Manufacturer, for an invention for—"A new or improved method of manufacturing wire for electric telegraphs and for such other uses as the same is or may be applicable to." *Letters Patent sealed.*

TRUMAN.
25th August 1860.

2052. EDWIN THOMAS TRUMAN, of Old Burlington Street, in the County of Middlesex, Surgeon, for an invention for—"An improved method of cleansing and purifying gutta-percha and other like substances and their compounds, and an improved apparatus to be employed therein." *Letters Patent sealed.*

NEWTON.
25th August 1860.

2053. ALFRED VINCENT NEWTON, of the Office for Patents, 66, Chancery Lane, in the County of Middlesex, Mechanical Draughtsman, for an invention for—"An improved mode of treating hides and skins preparatory to the tanning process."—*A communication to him from abroad by A. D. Lufkin, of Cleveland, Ohio, United States of America.* *Letters Patent sealed.*

CUTCLIFFE.
25th August 1860.

2054. ELIZA CUTCLIFFE, of Upper Norwood, in the County of Surrey, Executrix to her late brother, Henry Vaughan, of 2, Gray's Inn Square, London, for an invention for—"Improvements in machinery for cutting corks and bungs."—*A communication to her by her late brother, aforesaid.* *Provisional protection NOT granted.*

JOBSON. RANSOME. 25th August 1860.

2055. ROBERT JOBSON, of Dudley, in the County of Worcester, and ROBERT JAMES RANSOME, of Ipswich, for an invention for—"Improvements in apparatus used in producing moulds for casting." *Letters Patent sealed.*

CHATTERTON. SMITH. 25th August 1860.

2056. JOHN CHATTERTON, of Highbury Terrace, and WILLOUGHBY SMITH, of Pownall Road, Dalston, both in the County of Middlesex, for an invention for—"Improvements in the manufacture of telegraphic cables." *Provisional protection only.*

MENNONS. 27th August 1860.

2057. MARC ANTOINE FRANÇOIS MENNONS, of the British and Foreign Patent Offices, 39, Rue de l'Echiquier, Paris, in the Empire of France, for an invention for—"Improvements in the construction of axle boxes & axle bearings."—*A communication from Augustin Joseph Cambon, a person resident at Rosières-sur-Mouzon (Dept. des Vosges), Mechanical Engineer.* *Letters Patent sealed.*

MENNONS. 27th August 1860.

2058. MARC ANTOINE FRANÇOIS MENNONS, of the British and Foreign Patent Offices, 39, Rue de l'Echiquier, Paris, in the Empire of France, for an invention for—"Improvements in salt cellars, pepper-casters and similar utensils."—*A communication from Mr. J. L. Laine, a person resident at Paris.* *Letters Patent sealed.*

CLARK. 27th August 1860.

2059. WILLIAM CLARK, of 53, Chancery Lane, in the County of Middlesex, Engineer and Patent Agent, for an invention for—"Improvements in fire-arms."—*A communication to him from abroad by Mr. Charles Claude Etienne Minié, of Boulevart St. Martin, Paris, formerly Major in the Army.* *Letters Patent sealed.*

JOHNSON. 27th August 1860.

2060. JOHN HENRY JOHNSON, of 47, Lincoln's Inn Fields, in the County of Middlesex, and of 166, Buchanan Street, in the City of Glasgow, North Britain, Gentleman, for an invention for—"Improvements in the manufacture of sheet tin and in the machinery or apparatus employed therein."—*A communication to him from abroad by François Paulin Eugène Massière, of Paris, in the Empire of France.* *Provisional protection only.*

ARROWSMITH. 27th August 1860.

2061. JOHN ARROWSMITH, of Bilston, in the County of Stafford, Engineer, for an invention for—"New or improved sash iron for conservatories and other structures made principally of glass, and also for windows and skylights and other like purposes." *Letters Patent sealed.*

BOUSFIELD. 27th August 1860.

2062. GEORGE TOMLINSON BOUSFIELD, of Loughborough Park, Brixton, in the County of Surrey, for an invention for—"Improvements in thrust bearings for propeller shafts, and for other purposes."—*A communication to him from abroad by E. S. Renwick, of 335, Broadway, New York, United States of America.* *Letters Patent sealed.*

BOUSFIELD. 27th August 1860.

2063. GEORGE TOMLINSON BOUSFIELD, of Loughborough Park, Brixton, in the County of Surrey, for an invention for—"Improvements in building water craft."—*A communication to him from abroad by E. S. Renwick, of 335, Broadway, New York, United States of America.* *Letters Patent sealed.*

BOUSFIELD. 27th August 1860.

2064. GEORGE TOMLINSON BOUSFIELD, of Loughborough Park, Brixton, in the County of Surrey, for an invention for—"Improvements in stuffing-boxes and the packing thereof for the piston rods of steam-engines and for other purposes."—*A communication to him from abroad by E. S. Renwick, of 335, Broadway, New York, United States of America.* *Letters Patent sealed.*

BOUSFIELD. 27th August 1860.

2065. GEORGE TOMLINSON BOUSFIELD, of Loughborough Park, Brixton, in the County of Surrey, for an invention for—"Improvements in surface blow-offs for steam-boilers."—*A communication to him from abroad by E. S. Renwick, of 335, Broadway, New York, United States of America.* *Letters Patent sealed.*

BROOMAN. 27th August 1860.

2066. RICHARD ARCHIBALD BROOMAN, of 166, Fleet Street, in the City of London, Patent Agent, for an invention for—"Improvements in melodeons and similar keyed musical instruments."—*A communication to him from abroad by Joseph Poole Pirsson, of New York.* *Letters Patent sealed.*

PIATON. 27th August 1860.

2067. CLAUDE LOUIS PIATON, of Lyon, Town in the French Empire, Dyer, for an invention for—"Machinery or apparatus for washing yarns and other textile fabrics or materials in skeins." *Provisional protection only.*

BINGLEY. 27th August 1860.

2068. JOHN BINGLEY, of Leeds, in the County of York, Engineer, for an invention for—"Improvements in hydraulic presses, parts of which are also applicable to other purposes." *Letters Patent sealed.*

NEWTON. 27th August 1860.

2069. ALFRED VINCENT NEWTON, of the Office for Patents, 66, Chancery Lane, in the County of Middlesex, Mechanical Draughtsman, for an invention for—"Improvements in bakers' ovens."—*A communication to him from abroad by Iverson Wilson Knapp, of the City of New York, United States of America.* *Letters Patent sealed.*

MATHER. 27th August 1860.

2070. COLIN MATHER, of Salford, in the County of Lancaster, Engineer, for an invention for—"Improvements in gas singeing apparatus." *Letters Patent sealed.*

EFFERTZ. 28th August 1860.

2071. PETER EFFERTZ, of the City of Manchester, in the County of Lancaster, Engineer, for an invention for—"Improvements in machinery or apparatus for making bricks, tiles and similar articles, and in apparatus for transporting the same, which improvements are also applicable for the utilizing of turf, peat, coal dust or similar substances." *Letters Patent sealed.*

RADCLIFFE. 28th August 1860.

2072. JACOB HENRY RADCLIFFE, of Oldham, in the County of Lancaster, Iron and Tin Plate Worker, for an invention for—"Improvements in lubricating cans or vessels." *Provisional protection only.*

MARRIOTT. 28th August 1860.

2073. HENRY MARRIOTT, of Preston, in the County of Lancaster, Superintendent of the Fire Brigade, for an invention for—"Improvements in fire-escapes." *Letters Patent sealed.*

SIEMENS. 28th August 1860.

2074. CHARLES WILLIAM SIEMENS, of Great George Street, Westminster, in the County of Middlesex, for an invention for—"Improvements in engines to be worked by the alternate expansion and contraction of steam and other elastic fluids." *Letters Patent sealed.*

CALVERT. 28th August 1860.

2075. FREDERICK CRACE CALVERT, of the City of Manchester, in the County of Lancaster, Professor of Chemistry, for an invention for—"Collecting and saving certain products given off or emitted during the manufacture of coke." *Provisional protection only.*

ELLIS. REDGATE. 28th August 1860.

2076. EDWIN ELLIS, of St. Ann's Well Road, Nottingham, and WILLIAM REDGATE, of the Town of Nottingham, for an invention for—"Improvements in apparatus employed in bobbin net or twist lace machines." *Provisional protection only.*

HIRST. 28th August 1860.

2077. BENJAMIN HIRST, of Leeds, in the County of York, Gentleman, for an invention for—"Improvements in the construction of steam and other engines." *Letters Patent sealed.*

HAYNES. 28th August 1860.

2078. MICHAEL JOHN HAYNES, of 30, Marlborough Street, Bristol, for an invention for—"Improvements in the manufacture of driving straps." *Provisional protection only.*

KILNER. KILNER. KILNER. KILNER. 28th August 1860.

2079. CALEB KILNER, GEORGE KILNER, WILLIAM KILNER, and JOHN KILNER, all of the Providence Glass Bottle Works, Thornhill, Lees, near Dewsbury, in the County of York, for an invention for—"Improvements in the manufacture of glass bottles and the apparatus connected therewith." *Letters Patent sealed.*

CHANDLER. HEMPSON. 29th August 1860.

2080. HENRY CHANDLER, of Clements Inn Passage, in the County of Middlesex, Upholder, and AMIS HEMPSON, of Southampton Buildings, in the same County, Gentleman, for an invention for—"Improved seats for theatres or other public buildings." *Provisional protection only.*

VINES. 29th August 1860.

2081. RICHARD VINES, Veterinary Surgeon, of 3, Great College Street, Camden Town, in the Parish of St. Pancras, and in the County of Middlesex, for an invention for—"Self acting transverse floats for the propelling of steam vessels without any backwater." *Provisional protection only.*

EDWARDS. ILIFFE. 29th August 1860.

2082. JOHN EDWARDS, of 77, Aldermanbury, in the City of London, and CHARLES ILIFFE, of Birmingham, in the County of Warwick, for an invention for—"Improvements in the manufacture of buttons." *Letters Patent sealed.*

ILIFFE. 29th August 1860.

2083. CHARLES ILIFFE, of Birmingham, in the County of Warwick, for an invention for—"Improvements in the manufacture of metalic and non-metalic substances for expanding dresses and other purposes." *Letters Patent sealed.*

WILSON. 29th August 1860.

2084. JOSEPH WILSON, of Birmingham, in the County of Warwick, Manufacturer, for an invention for—"A new or improved warm bath." *Letters Patent sealed.*

WAIN. INSTONE. 29th August 1860.

2085. WILLIAM HENRY WAIN, of Birmingham, in the County of Warwick, Brass Founder, and WILLIAM INSTONE, of Wolverhampton, in the County of Stafford, Gas Fitter, for an invention for—"A new or improved lamp." *Provisional protection only.*

DEANE. 29th August 1860.

2086. EDWARD DEANE, of Arthur Street East, London Bridge, in the City of London, Engineer, for an invention for—"Improvements in apparatus for facilitating culinary roasting." *Letters Patent sealed.*

NEWTON. 29th August 1860.

2087. WILLIAM EDWARD NEWTON, of the Office for Patents, 66, Chancery Lane, in the County of Middlesex, Civil Engineer, for an invention for—"Improvements in the manufacture of iron and steel."—*A communication to him from abroad by Ebenezer Green Pomeroy, of the City of New York.* *Provisional protection only.*

PERROTT. MOLONY. 29th August 1860.

2088. RICHARD PERROTT, Junior, of Cork, in the Kingdom of Ireland, Iron Founder, and JOHN MOLONY, of Cork, Setter of Kitchen Ranges, for an invention for—"An improved mode of applying roasting jacks to kitchen ranges and cooking stoves." *Letters Patent sealed.*

FAIRBAIRN. 29th August 1860.

2089. Sir PETER FAIRBAIRN, of Leeds, in the County of York, Knight, for an invention for—"Improvements in the construction of rollers used in machinery for preparing hemp and flax." *Letters Patent sealed.*

BROOMAN. 29th August 1860.

2090. RICHARD ARCHIBALD BROOMAN, of 166, Fleet Street, in the City of London, Patent Agent, for an invention for—"Improvements in apparatus for manufacturing embossed or figured fabrics in colours."—*A communication to him from abroad by Edme Germain Bossuat, of Paris.* *Provisionalprotection only.*

KIRRAGE. RIPLEY. 30th August 1860.

2091. WILLIAM KIRRAGE, of No. 5, Albion Place, Vauxhall, and ABRAHAM RIPLEY, of the same place, in the County of Surrey, for an invention for—"The amalgamation of certain materials forming a plastic composition applicable to works of the fine arts, building purposes, imitations of marbles, ancient carvings, and various other uses." *Letters Patent sealed.*

MÈGE. 30th August 1860.

2092. HIPPOLYTE MÈGE, Chemist, of 2, Rue Sainte Appoline, Paris, France, and of 4, South Street, Finsbury, London, for an invention for—"Improvements in making bread and ship-biscuit." *Letters Patent sealed.*

BEAUMONT. 30th August 1860.

2093. ANDRÉ ALÈXANDRE BEAUMONT, Mechanician, of 2, Rue Sainte Appoline, Paris, France, and of 4, South Street, Finsbury, London, for an invention for—"An engine for raising liquids." *Letters Patent sealed.*

LOCKETT. GOODWIN. 30th August 1860.

2094. ENOCH LOCKETT, of Great Fenton, in the Parish of Stoke-upon-Trent, in the County of Stafford, Potter, and HERBERT GOODWIN, of the same place, Bricksetter, for an invention for—"An improvement in stacking earthenware during the process of firing, and in apparatus used for that purpose." *Provisional protection only.*

DODGE. 30th August 1860.

2095. GEORGE POMEROY DODGE, of 44, Saint Paul's Church Yard, in the City of London, Merchant and Manufacturer, for an invention for—"Improvements in pumps and in apparatus for working the same."—*A communication to him from abroad by James M. Edney, of Chambers Street, New York, in the United States of America.* *Letters Patent sealed.*

JOHNSON. 30th August 1860.

2096. JOHN HENRY JOHNSON, of 47, Lincoln's Inn Fields, in the County of Middlesex, and of 166, Buchanan Street, in the City of Glasgow, North Britain, Gentleman, for an invention for—"Improvements in the manufacture of railway chairs."—*A communication to him from abroad by James H. Swett, of Pittsburg, Pennsylvania, in the United States of America.* *Letters Patent sealed.*

JONES. 30th August 1860.

2097. JOSIAH JONES, Junior, of Liverpool, for an invention for—"Improvements in gun carriages." *Provisional protection only.*

RENAULT. 30th August 1860.

2098. CHARLES JEAN BAPTISTE RENAULT, of Paris, in the Empire of France, for an invention for—"Improvements in the manufacture of shirts and chemises." *Letters Patent sealed.*

NEWTON. 30th August 1860.

2099. WILLIAM EDWARD NEWTON, of the Office for Patents, 66, Chancery Lane, in the County of Middlesex, Civil Engineer, for an invention for—"Improvements in floating structures."—*A communication to him from abroad by Thomas Schofield, and Robert Schofield, of Grass Valley, County of Nevada, California, United States of America.* *Provisional protection only.*

UNDERHILL. 30th August 1860.

2100. WILLIAM SCOTT UNDERHILL, of Newport, in the County of Salop, Ironfounder, for an invention for—"Improvements in the manufacture of iron fencing or lattice." *Complete specification; Letters Patent sealed.*

MARTIN. 31st August 1860.

2101. CHARLES MARTIN, of Isleworth, in the County of Middlesex, Civil Engineer, for an invention for—"Improvements in the form and in the method of and means for constructing beams, joists, girders and rails, and in the permanent way of railways generally." *Provisional protection only.*

RICHARDSON. 31st August 1860.

2102. GEORGE RICHARDSON, of Alma Park, Levenshulme, near Manchester, in the County of Lancaster, Gentleman, for an invention for—"An improved instrument to be used for ascertaining distances." *Provisional protection only.*

STOCKER. 31st August 1860.

2103. ALEXANDER SOUTHWOOD STOCKER, of Clifton, in the County of Gloucester, Manufacturer, for an invention for—"Improvements in the manufacture of horse-shoes." *Letters Patent sealed.*

BELTON. 31st August 1860.

2104. PATRICK MICHAEL BELTON, of New York City, United States of America, Sugar Refiner, for an invention for—"The manufacture of a compound to be used as a substitute for animal charcoal in refining sugar and otherwise." *Letters Patent sealed.*

JOHNSON. 31st August 1860.

2105. JOHN HENRY JOHNSON, of 47, Lincoln's Inn Fields, in the County of Middlesex, and of 166, Buchanan Street, in the City of Glasgow, North Britain, Gentleman, for an invention for—"Improvements in the treatment of zinc and other ores, and in the apparatus employed therein."—*A communication to him from abroad by Adrien Muller, of Paris, and Alexandre Lencauchez, of Besançon, both in the Empire of France, Engineers.* *Letters Patent sealed.*

GERRANS. 31st August 1860.

2106. WILLIAM GERRANS, of Tregony, in the County of Cornwall, for an invention for—"Improvements in horse-rakes." *Provisional protection only.*

SALISBURY. DICKSON. 31st August 1860.

2107. SILAS COVELL SALISBURY, of Essex Street, in the City of Westminster, Gentleman, and JOHN FARMERLEY DICKSON, of Nottingham, Sewing-Machine Maker, for an invention for "Improvements in sewing-machines." *Provisional protection only.*

NEWTON. 31st August 1860.

2108. WILLIAM EDWARD NEWTON, of the Office for Patents, 66, Chancery Lane in the County of Middlesex, Civil Engineer, for an invention for—"An improvement in compositions for tanning skins and hides of all descriptions."—*A communication to him from abroad by C. L. Robinson, and T. G. Eggleston, both of Fox Lake, Dodge, County, State of Wisconsin, United States of America.* *Letters Patent sealed.*

SNOWDEN. 31st August 1860.

2109. WILLIAM FRANCIS SNOWDEN, of Chichester Place, Gray's Inn Road, in the County of Middlesex, Machine Maker, for an invention for—"Improved machinery for cutting chaff." *Letters Patent sealed.*

NEWTON. 31st August 1860.

2110. WILLIAM EDWARD NEWTON, of the Office for Patents, 66, Chancery Lane, in the County of Middlesex, Civil Engineer, for an invention for—"Improvements in air engines."—*A communication to him from abroad by John Ericsson, of the City of New York.* *Letters Patent sealed.*

WILLANS. 31st August 1860.

2111. JACOB GEOGHEGAN WILLANS, of 2, Clarence Place, Belfast, for an invention for—"Improvements in the manufacture of iron and steel." *Letters Patent sealed.*

ALLEN. 1st September 1860.

2112. FREDERICK ALLEN, of 70, Seymour Place, Bryanstone Square, in the County of Middlesex, for an invention for—"Improvements in a machine called a dumb jockey used for the breaking and training of horses." *Provisional protection only.*

PILON. 1st September 1860.

2113. MARTIN REGUL PILON, Citizen of the United States, residing at Aguas Calientes, in Mexico, but at present in Brussels, in the Kingdom of Belgium, Merchant, for an invention for—"Improvements in the manufacture and construction of fire-arms, and in the means of loading the same and controlling more effectually the action of the firelock." *Letters Patent sealed.*

HOLROYD. SMITH. 1st September 1860.

2114. WARD HOLROYD, of Halifax, in the County of York, Machine Maker, and SAMUEL SMITH, of the same place, Overlooker, for an invention for—"Improvements in looms for weaving." *Letters Patent sealed.*

BOWLER.
1st September 1860.

2115. JOHN COBB BOWLER, of Bowden, near Manchester, in the County of Lancaster, Gentleman, for an invention for—"Improvements in obtaining motive-power." *Provisional protection only.*

HARRISON.
1st September 1860.

2116. CHARLES WEIGHTMAN HARRISON, of Plumstead Common, in the County of Kent, Civil Engineer, for an invention for—"Improvements in electric telegraphs." *Letters Patent sealed.*

JOHNSON.
ROSS.
1st September 1860.

2117. WILLIAM JOHNSON, Metal Merchant, and WILLIAM ROSS, Brassfounder, both of Glasgow, in the County of Lanark, North Britain, for an invention for—"Improvements in taps or valves." *Letters Patent sealed.*

HARGREAVES.
HOLDEN.
NUTTALL.
1st September 1860.

2118. STEPHEN HARGREAVES, of Haslingden, in the County of Lancaster, Warper, ROBERT HOLDEN, of the same place, Beamer, and JAMES NUTTALL, of the same place, Overlooker, for an invention for—"An improved warping machine." *Letters Patent sealed.*

FISHER.
FISHER.
1st September 1860.

2119. JOHN FISHER, of Leamington, in the County of Warwick, Jobbing Smith and Fitter, and JOSEPH FISHER, of Dudley, in the County of Worcester, Tinman and Brazier, for an invention for—"An improvement or improvements in oven grates and kitchen ranges." *Letters Patent sealed; no specification filed.*

HOLLANDS.
1st September 1860.

2120. GEORGE HOLLANDS, of Rochester, County of Kent, Brewer, for an invention for—"Improved apparatus to be used in the process of fermentation." *Provisional protection only.*

FORGIE.
FINN.
3rd September 1860.

2121. WILLIAM FORGIE, of the Town of Nottingham, Lace Cap Manufacturer, and THOMAS FINN, of the Town of Nottingham, Manufacturer, for an invention for—"Improvements in the construction of apparatus for the preservation of life from drowning, and in the preparation of the material employed for this purpose and for rendering articles buoyant in water." *Letters Patent sealed.*

BOYD.
3rd September 1860.

2122. JAMES EDWARD BOYD, of Hither Green, Lewisham, in the County of Kent, Gentleman, for an invention for—"Improvements in machines used for cutting, scattering and collecting vegetable and other substances." *Provisional protection only.*

MUNTZ.
3rd September 1860.

2123. WILLIAM HENRY MUNTZ, of Millbrook, in the County of Hants, for an invention for—"An improved apparatus for relieving the strain upon ships' cables." *Letters Patent sealed.*

MOORE.
NEWBERRY.
3rd September 1860.

2124. HENRY MOORE, of Burnley, in the County of Lancaster, Cotton Spinner, and SAMUEL NEWBERRY, of the same place, Manager, for an invention for—"Improvements in machinery for sizeing or dressing warps or yarns." *Letters Patent sealed.*

MASON.
3rd September 1860.

2125. CHARLES MASON, of Basford, Nottingham, Lace Dresser, for an invention for—"Improvements in apparatus for dressing lace." *Letters Patent sealed*

DONISTHORPE.
3rd September 1860.

2126. GEORGE EDMOND DONISTHORPE, of Leeds, for an invention for—"Improvements in sizing yarn or thread previous to warping." *Provisional protection only.*

JOHNSON.
3rd September 1860.

2127. JOHN HENRY JOHNSON, of 47, Lincoln's Inn Fields, in the County of Middlesex, and of 166, Buchanan Street, in the City of Glasgow, North Britain, Gentleman, for an invention for—"Improvements in the manufacture of moulds and cores for the casting of cylindrical articles and in the machinery or apparatus employed therein."—*A communication to him from abroad by Homer Parmellee, of Philadelphia, State of Pennsylvania, United States of America.* *Provisional protection only.*

GRIMSTON.
3rd September 1860.

2128. THOMAS GRIMSTON, of Clifford, in the County of York, Shoe Thread Manufacturer, for an invention for—"Improvements in machinery for balling threads, yarns or twines made from fibrous materials." *Letters Patent sealed.*

DELAMARE.
4th September 1860.

2129. WILLIAM HENRY DELAMARE, of 14, Clarence Place, Hackney Road, in the County of Middlesex, for an invention for—"An improved machine for cleansing and peeling grain and seeds." *Provisional protection only.*

STEVENS.
4th September 1860.

2130, JAMES JOHN STEVENS, of Darlington Works, Southwark, in the County of Surrey, Engineer, for an invention for—"Improvements in iron bedsteads."—*A communication to him from abroad by George Henry Faulkner, of Madras.* *Letters Patent sealed.*

HUGHES. WILLIAMS. LEYSHON. 4th September 1860.

2131. JOHN HUGHES, WILLIAM WILLIAMS, and GEORGE LEYSHON, of Brockmoor Works, Brierly Hill, Staffordshire, for an invention for—"Improvements in the manufacture of tin and terne plates and in apparatus employed therein." *Letters Patent sealed.*

STANDLY. 4th September 1860.

2132. HENRY JOHN STANDLY, of 9, Pall Mall East, in the City of Westminster, in the County of Middlesex, Gentleman, for an invention for—"Improvements in the production of gas for illumination and other purposes, and the utilization of the products arising therefrom." *Provisional protection only.*

WHEELER. 4th September 1860.

2133. GEORGE PRINTY WHEELER, of Abinghall, near Mitcheldean, in the County of Gloucester, Paper Maker, for an invention for—"An improved mode of and apparatus for preparing half-stuff for paper makers." *Letters Patent sealed.*

WHEELER. 4th September 1860.

2134. GEORGE PRINTY WHEELER, of Abinghall, near Mitcheldean, in the County of Gloucester, Paper Maker, for an invention for—"An improved mode of and apparatus for preparing bleaching agents." *Letters Patent sealed.*

SOUTHBY. 4th September 1860.

2135. ANTHONY SOUTHBY, of Bulford, in the County of Wilts, Doctor of Medicine, for an invention for—"Improvements in the manufacture of paper." *Provisional protection only.*

POTTER. PEEK. 5th September 1860.

2136. HAROLD POTTER, of the City of Manchester, Gentleman, and ALFRED PEEK, of the same place, Manufacturing Chemist, for an invention for—"Improvements in treating or preparing textile materials and fabrics." *Letters Patent sealed.*

SCHUHMAN. 5th September 1860.

2137. SIGISMUND SCHUHMAN, of Burnley, in the County of Lancaster, Cotton Manufacturer, for an invention for—"Improvements in looms and in the means of driving the same." *Provisional protection only.*

STEWART. 5th September 1860.

2138. DAVID YOOLOW STEWART, of Glasgow, in the County of Lanark, North Britain, Ironfounder, for an invention for—"Improvements in moulds for casting." *Letters Patent sealed.*

VAUVILLÉ. 5th September 1860.

2139. ERNEST VAUVILLÉ, of No. 96, Rue de Bondy, in the City of Paris, in the Empire of France, Sugar Baker, for an invention for—"A system of extracting juice from beetroot and other plants." *Provisional protection only.*

GEDGE. 5th September 1860.

2140. WILLIAM EDWARD GEDGE, of the firm of John Gedge and Son, of No. 11, Wellington Street, Strand, in the County of Middlesex, Patent Agent, for an invention for—"Improved cylinders for laminating metals."—*A communication to him from abroad by Eugène Louis Robert, of No. 96, Rue de Bondy, Paris, in the Empire of France, Mécanicien.* *Provisional protection only.*

COOPER. 5th September 1860.

2141. JOHN COOPER, of Bilston, for an invention for—"Improvements in railways, railway carriages, and apparatus connected therewith." *Provisional protection only.*

RANSOME. 5th September 1860.

2142. FREDERICK RANSOME, of Ipswich, for an invention for—"Improvements in preserving stone, bricks and other porous building materials, and in cementing porous and other matters in manufacturing blocks and other articles thereof." *Provisional protection only.*

NEWTON. 5th September 1860.

2143. WILLIAM EDWARD NEWTON, of the Office for Patents, 66, Chancery Lane, in the County of Middlesex, Civil Engineer, for an invention for—"An improvement in belt shippers."—*A communication to him from abroad by John C. Goar, of Monterey, in the State of California, and United States of America.* *Letters Patent sealed.*

BEDSON. 5th September 1860.

2144. GEORGE BEDSON, of Manchester, in the County of Lancaster, Manager, for an invention for—"Improvements in annealing, cleaning and galvanizing or otherwise coating wire and sheets or strips of metal with metals." *Letters Patent sealed.*

VERGNES. 5th September 1860.

2145. MAURICE VERGNES, of the City and State of New York, United States of America, for an invention for—"An improvement in the construction of magnetic or electric helices." *Letters Patent sealed.*

WILSON. JACKSON. 5th September 1860.

2146. GEORGE FERGUSSON WILSON, Managing Director of Prices Patent Candle Company, Limited, Belmont, Vauxhall, and JOHN JACKSON, of 24, York Street, Bromborough Pool, near Birkenhead, Engineer, for an invention for—"Improvements in lamps and lamp wicks." *Provisional protection only.*

KINIPPLE. 5th September 1860.

2147. WALTER ROBERT KINIPPLE, of Limehouse, in the County of Middlesex, Civil Engineer, for an invention for—"An improvement in water closets and in flushing tanks or apparatuses." *Letters Patent sealed.*

HUGGETT. 5th September 1860.

2148. JOHN HUGGETT, of Eastbourne, in the County of Sussex, Engineer, for an invention for—"A method of and apparatus for regulating the light in street and other lamps, whereby the relighting and extinguishing of the same may be dispensed with." *Letters Patent sealed.*

WALKER. 6th September 1860.

2149. JOSEPHUS WALKER, of Bradford, in the County of York, Self-acting Temple Maker, for an invention for—"Improvements in self-acting temples." *Provisional protection only.*

SCHNEIDER. 6th September 1860.

2150. CHARLES AUGUSTUS SCHNEIDER, of Hesse Darmstadt, Germany, now residing at No. 9, Albany Street, Regent's Prk., Middlesex, for an invention for—"Improvements in manufacturing letters, numerals, arms, designs, trademarks, mosaic and other ornaments to be attached to glass or other smooth surface." *Letters Patent sealed.*

DAVIES. 6th September 1860.

2151. JOHN DAVIES, of Manchester, in the County of Lancaster, Civil Engineer, for an invention for—"An improved application of material to the manufacture of coupling apparatus to be employed in connecting locomotive engines, tenders and carriages together upon railways." *Provisional protection only.*

BURKE. BURKE. 6th September 1860.

2152. WILLIAM HENRY BURKE, the elder, and WILLIAM HENRY BURKE, the younger, of Brompton, in the County of Middlesex, Gentlemen, for an invention for—"A method of preparing fabrics composed of or containing caoutchouc to enable them to resist the action of colours and varnishes containing oil." *Letters Patent sealed.*

WRIGHT. 6th September 1860.

2153. RICHARD WRIGHT, of Grosvenor Street, Camberwell, in the County of Surrey, Sugar Refiner, for an invention for—"Improvements in the manufacture and refining of sugar, and in apparatus employed therein." *Letters Patent sealed.*

NEWTON. 6th September 1860.

2154. WILLIAM EDWARD NEWTON, of the Office for Patents, 66, Chancery Lane, in the County of Middlesex, Civil Engineer, for an invention for—"Improvements in the manufacture of archil."—*A communication to him from abroad by Mr. Jean Frédéric Beyerbach, of Frankfort on the Maine.* *Provisional protection only.*

OLDFIELD. 6th September 1860.

2155. BENJAMIN OLDFIELD, of Coventry, in the County of Warwick, Machinist, for an invention for—"Improvements in looms." *Letters Patent sealed and specification filed by order.*

LESTER. 6th September 1860.

2156. AARON LESTER, of Coventry, in the County of Warwick, Draftsman and Designer, for an invention for—"An improvement in looms for weaving." *Letters Patent sealed.*

HERRING. LICHTENSTADT. 6th September 1860.

2157. GEORGE HERRING, of 3, Albert Terrace, Hatcham Park, in the County of Surrey, Gentleman, and DAVID LICHTENSTADT, of Peckham, in the County of Surrey, Chemist, for an invention for—"Improvements in treating a certain substance to obtain textile fibres and materials for paper making and charcoal for gunpowder, pyrotechnic and other purposes." *Provisional protection only.*

NICOLL. 7th September 1860.

2158. BENJAMIN NICOLL, Shirt Maker, of 42, Regent Street, London, for an invention for—"An improved method of treating needles, and needles used in sewing and other machines, applicable also to those parts of such machines that hold the needles." *Provisional protection only.*

LACY. HOMERSHAM. 7th September 1860.

2159. AUGUSTUS DACRE LACY, of Hall House, Knayton, in the County of York, Gentleman, and WILLIAM COLLETT HOMERSHAM, of Adelphi Terrace, in the County of Middlesex, Civil Engineer, for an invention for—"Improvements in machinery and implements for ploughing and cultivating land." *Letters Patent sealed.*

TRAVIS. 7th September 1860.

2160. JOSEPH SIDDALL TRAVIS, of Stretford, near the City of Manchester, Book Keeper, for an invention for—"Improvements in traction engines." *Letters Patent sealed; no specification filed.*

STEVENS. 7th September 1860.

2161. CHARLES STEVENS, Manager of the British and Foreign Office for Patents, 1B, Welbeck Street, Cavendish Square, in the County of Middlesex, for an invention for—"An improved method of preserving various alimentary substances."—*A communication to him from abroad by Madame Louise Fauve, of 42, Rue Laffite, Paris, in the Empire of France.* *Provisional protection only.*

STEVENS.
7th September 1860.

2162. CHARLES STEVENS, Manager of the British and Foreign Office for Patents, No. 1B, Welbeck Street, Cavendish Square, in the County of Middlesex, for an invention for—"An improved impermeable oil varnish."—*A communication to him from abroad by Antoine Bouet, of 42, Rue Laffite, Paris, in the Empire of France.*
Letters Patent sealed.

STEVENS.
7th September 1860.

2163. CHARLES STEVENS, Manager of the British and Foreign Office for Patents, No. 1B, Welbeck, Street, Cavendish Square, in the County of Middlesex, for an invention for—"Improved bags to be used in the manufacture of sugar."—*A communication to him from abroad by Edouard Fourmeaux, of 42, Rue Laffite, Paris, in the Empire of France.* *Provisional protection only.*

STEVENS.
7th September 1860.

2164. CHARLES STEVENS, Manager of the British and Foreign Office for Patents, No. 1B, Welbeck Street, Cavendish Square, in the County of Middlesex, for an invention for—"An improved lavatory."—*A communication to him from abroad by Flury Jourjon, of 42, Rue Laffite, Paris, in the Empire of France.*
Complete specification; Letters Patent sealed.

COWPER.
7th September 1860.

2165. CHARLES COWPER, of No. 20, Southampton Buildings, Chancery Lane, in the County of Middlesex, Patent Agent, for an invention for—"Improvements in the manufacture of cast steel and in the re-manufacture of old steel."—*A communication to him from abroad by Louis Jules Duhesme, Henri Catherine Camille de Ruolz, and Anselme Louis Marie de Fontenay, all residing at Paris, in France.*
Letters Patent sealed.

HAMILTON.
7th September 1860.

2166. JOHN HAMILTON, Junior, of Liverpool, for an invention for "Improvements in sockets for receiving the lower parts of the posts or uprights employed in constructing electric telegraphs." *Letters Patent sealed.*

AUBERTIN.
7th September 1860.

2167. PAUL ELIAS AUBERTIN, of Great Winchester Street, in the City of London, for an invention for—"Improvements in the manufacture of soap."—*A communication to him from abroad by Jules Gabriel Gros, of Mulhouse, France.*
Letters Patent sealed.

WILDSMITH.
7th September 1860.

2168. JAMES HENRY STAPLES WILDSMITH, of Wolverhampton, in the County of Stafford, Manufacturing Chemist, for an invention for—"A new or improved lubricating material or compound; which said material or compound may also be employed in the manufacture of soap." *Letters Patent sealed.*

SPRATT.
7th September 1860.

2169. JAMES SPRATT, of Camden Road Villas, Camden Town, in the County of Middlesex, Gentleman, for an invention for—"Improvements in electrical conductors and their fittings." *Letters Patent sealed.*

DEANE.
7th September 1860.

2170. EDWARD DEANE, of Arthur Street East, London Bridge, in the City of London, Engineer, for an invention for—"An improved rotary cooking apparatus."
Provisional protection only.

WEISKOPF.
8th September 1860.

2171. ELIAS WEISKOPF, of Pesth, in Hungary, and of No. 5, Claremont Square, in the County of Middlesex, Chemist, for an invention for—"Improvements in the manufacture of certain kinds of artificial combustible for lighting of wood and coal."
Letters Patent sealed.

HOARE.
8th September 1860.

2172. DEANE JOHN HOARE, of No. 7, Albemarle Street, Piccadilly, Captain in the Royal Elthorne Militia, for an invention for—"Improvements in locks."
Provisional protection only.

CROSS.
8th September 1860.

2173. PETER RICHARDS CROSS, of Sudbury in the County of Suffolk, Manufacturer, for an invention for—"Improvements in means or apparatus to give protection to the mouth and nostrils in respiration and to the throat and chest against the injurious effects of atmospheric influences." *Letters Patent sealed.*

YATES.
8th Septemter 1860.

2174. FREDERIC YATES, Engineer, of Parliament Street, London, for an invention for—"Improvements in apparatus for and in the mode of manufacturing iron, steel and other metals and substances, gaseous and solid fuel being thereto applied as the heating, reducing, cementing, and oxidizing agents." *Provisional protection only.*

HORTON.
8th September 1860.

2175. ENOCH HORTON, of Darlaston, in the County of Stafford, Manufacturer, for an invention for—"New or improved machinery to be used in the manufacture of bolts, nuts, and screws." *Letters Patent sealed.*

HERBELOT.
8th September 1860.

2176. ARMAND LOUIS ANDRÉ HERBELOT, of Paris, in the French Empire, for an invention for—"An improved method of manufacturing paper from wood."
Provisional protection only.

GEDGE. 8th September 1860.

2177. WILLIAM EDWARD GEDGE, of the firm of John Gedge and Son, of No. 11, Wellington Steeet, Strand, in the County of Middlesex, Patent Agent, for an invention for—"Improved means of extinguishing conflagrations."—*A communication to him from abroad by Alexandre Lelandais, of Nantes, in the Department of the Loire Inférieure, France, Distiller.* *Letters Patent sealed.*

DUVERGÉ. 8th September 1860.

2178. JEAN BAPTISTE FRÉDÉRIC DUVERGÉ, of Bordeaux, in the Département of the Gironde, in the Empire of France, Mechanical Engineer, for an invention for—"Improved machinery or apparatus for horizontal, vertical or inclined boring." *Provisional protection only.*

FOURDRINIER. 8th September 1860.

2179. JOSEPH FOURDRINIER, of 17, Grove Terrace, New Peckham, in the County of Surrey, for an invention for—"Improvements in kilns for drying grain, seeds and other agricultural produce." *Provisional protection only.*

WOOD. 8th September 1860.

2180. JAMES WOOD, of West Smithfield, Type-Founder, for an invention for—"Improvements in stereotyping apparatus." *Letters Patent sealed.*

KLEINFELDER. GIRARDET. 8th September 1860.

2181. JOHN JOSEPH CONRAD KLEINFELDER, of Paris, in the Empire of France, Merchant, and CHARLES GIRARDET, of Vienna, in the Empire of Austria, Merchant, for an invention for—"Improvements in carriages and harness for horses, and in the means of attaching harness to carriages." *Provisional protection only.*

ZANNI. 8th September 1860.

2182. GEMINIANO ZANNI, of Upper King Street, Holborn, in the County of Middlesex, Optician, for an invention for—"Improvements in apparatus for roasting." *Letters Patent sealed.*

CANTAGREL. 10th September 1860.

2183. FRANÇOIS JEAN CANTAGREL, Civil Engineer, of No. 7, Rue Buffault, Paris, in the Empire of France, for an invention for—"Apparatus for ascertaining the existence of escapes in pipes and vessels for conveying (and holding) lighting and heating gases, which apparatus he denominates 'Escape Indicator.'" *Leters Patent sealed.*

THORNTON. THORNTON. THORNTON. 10th September 1860.

2184. THOMAS THORNTON, EDWIN THORNTON, and JOSEPH THORNTON, all of Elland, in the County of York, Manufacturers, for an invention for—"Improvements in looms for weaving." *Letters Patent sealed.*

ROBSON. 10th September 1860.

2185. WILLIAM EVANS ROBSON, of No. 4, Adams Court, Old Broad Street, in the City of London, Gentleman, for an invention for—"The application of an improved elastic material for springs or cushions on the chairs of railways and tram roads, or in any other position, to prevent the friction caused by the working of iron on iron or other metal substances." *Provisional protection only.*

WILKINSON. WRIGHT. 10th September 1860.

2186. WILLIAM WILKINSON, and HENRY THOMPSON WRIGHT, of Boston, in the County of Lincoln, Iron Founders, for an invention for—"Improvements in apparatus used when stacking straw and other agricultural produce." *Letters Patent sealed.*

TURPIE. 10th September 1860.

2187. THOMAS TURPIE, of North Shields, Master Mariner, for an invention for—"Improvements in furling sails." *Letters Patent sealed.*

HILL. 11th September 1860.

2188. HENRY CHEETHAM HILL, of Stalybridge, in the County of Chester, Manager, for an invention for—"Improvements in the construction of stays for steam-boilers." *Provisional protection only.*

GREENWOOD. 11th September 1860.

2189. JAMES GREENWOOD, of Halifax, in the County of York, Damask Manufacturer, for an invention for—"Improvements in looms for weaving." *Letters Patent sealed.*

WELLMAN. 11th September 1860.

2190. GEORGE WELLMAN, of Lowell, in the United States of America, for an invention for—"Improvements in carding-engines for carding cotton and other fibrous materials." *Letters Patent sealed.*

NICOLL. 11th September 1860.

2191. DONALD NICOLL, of the firm of Henry John Nicoll and Donald Nicoll, of Regent Street, in the City of Westminster, Merchant Tailors, for an invention for—"An improved over-coat particularly adapted to military purposes, to be called 'Nicoll's Lacerna.'" *Letters Patent sealed.*

MENNONS. 11th September 1860.

2192. MARC ANTOINE FRANCOIS MENNONS, of the British and Foreign Patent Offices, 39, Rue de l'Echiquier, Paris, in the Empire of France, for an invention for—"An improved apparatus for sealing letters and other documents."—*A communication from L. M. H. Fromont, a person resident at Paris.* *Letters Patent sealed.*

CLAPHAM. 11th September 1860.

2193. ROBERT CALVERT CLAPHAM, of Walker, in the County of Northumberland, Analytical Chemist, for an invention for—"Improvements in the manufacture of bleaching powder and apparatus employed therein." *Letters Patent sealed.*

DÉNÉCHAUD. CHAPA. 11th September 1860.

2194. JEAN DÉNÉCHAUD, and JOSEPH CHAPA, of Bordeaux, in the French Empire, Gentlemen, for an invention for—"An electric controller for indicating the relative position of trains on railways." *Letters Patent sealed.*

PEACOCK. TRUMAN. 11th September 1860.

2195. DAVID PEACOCK, of Number 6, Walpole Street, New Cross, in the County of Kent, Engineer, and THOMAS RICHARD TRUMAN, of Number 6, Edwin Place, Peckham, in the County of Surrey, Engineer, for an invention for—"Improvements in the construction of wheels for traction and locomotive engines." *Provisional protection only.*

BOYLE. 11th September 1860.

2196. THOMAS BOYLE, of The York Street Spinning Company, Belfast, in the County of Antrim, for an invention for—"Improvements in preparing-machinery for flax and other fibrous substances." *Letters Patent sealed.*

CLEMO. 11th September 1860.

2197. EBENEZER CLEMO, of the City of Toronto, Province of Canada, Chemist, for an invention for—"An improved mode of manufacturing stock for paper from straw and other vegetables substances." *Provisional protection only.*

COOPMAN. 11th September 1860.

2198. GILBERT LUCIEN PIERRE COOPMAN, Merchant, and President of the Commercial Court at Constantine (Algéria), for an invention for—"New means and processes of tanning hides and skins by which a graduated impermeability of leathers is obtained." *Letters Patent sealed.*

DE LOUVRIÉ. 12th September 1860.

2199. J. CHARLES DE LOUVRIÉ, of the No. 18, Boulevard Beaumarchais (Paris), in the Empire of France, Gentleman, for an invention for—"Improvements in moulding without models." *Complete specification; Letters Patent sealed.*

BAILLIE. 12th September 1860.

2200. BENJAMIN BAILLIE, of No. 7, Henry Street, Cumberland Market, in the County of Middlesex, for an invention for—"An improved rifle-range." *Provisional protection only.*

MASSEY. 12th September 1860.

2201. WILLIAM MASSEY, of Linacre-Marsh, near Liverpool, in the County of Lancaster, Manufacturer of Artificial Mineral Teeth, for an invention for—"Improvements in the manufacture of artificial mineral teeth, and the means whereby the same may be more securely attached to artificial gums and palates formed of vulcanite or other similar materials." *Provisional protection only.*

FREPPEL. 12th September 1860.

2202. FREDERIC ANTOINE NICOLAS FREPPEL, of Paris, in the French Empire, Manufacturer, for an invention for—"An improved preservative and sizing compound for sizing cotton, wool, linen or other yarns for weaving, and for dressing textile fabrics." *Letters Patent sealed.*

WILSON. 12th September 1860.

2203. ROBERT HENRY CAPEL WILSON, of the firm of Frankham and Wilson, of No. 12, Wilson Street, Gray's Inn Road, in the County of Middlesex, Meteorological Instrument Makers, for an invention for—"Improvements in registering thermometers." *Letters Patent sealed.*

PETRIE. 12th September 1860.

2204. JOHN PETRIE, Junior, of Rochdale, in the County of Lancaster, Ironmonger, for an invention for—"Improvements in cocks or taps for liquids." *Letters Patent sealed.*

GRATRIX. JAVAL. 12th September 1860.

2205. ROBERT HODGSON GRATRIX, of Salford, in the County of Lancaster, Dyer, and MATHIAS PARAF JAVAL, of Thann, France, Calico Printer, for an invention for—"Improvements in dyeing and printing textile materials and fabrics." *Letters Patent sealed.*

WATTS. 13th September 1860.

2206. GEORGE EDWARD WATTS, of the City of Bristol, Gentleman, for an invention for—"An improved propeller wheel for ships."—*A communication to him from abroad by Thomas Tripp, of Buffalo, in the County of Erie, and State of New York, in the United States of America, Engineer.* *Provisional protection NOT granted.*

WRIGHT. 13th September 1860.

2207. JAMES WRIGHT, of 42, Bridge Street, Blackfriars, City of London, Civil Engineer, for an invention for—"Improvements in the construction of safety or Davy lamps."—*A communication to him from abroad by Mr. Laurent-Larmusiaux, of Paris, in the Empire of France.* *Letters Patent sealed.*

WRIGHT. 13th September 1860.

2208. JAMES WRIGHT, of 42, Bridge Street, Blackfriars, City of London, Civil Engineer, for an invention for—"An improvement or improvements in the construction of boots and shoes."—*A communication to him from abroad by Lyman Reed Blake, of Abingdon, Plymouth, Massachusetts, United States of America.*
Letters Patent sealed.

THOMPSON. 13th September 1860.

2209. NATHAN THOMPSON, Junior, of 15, Abbey Gardens, St. John's Wood, for an invention for—"Improvements in boat building and in apparatus used therein."
Letters Patent sealed.

RANSFORD. 13th September 1860.

2210. ARTHUR RANSFORD, of the City of Manchester, in the County of Lancaster, Brass Finisher, for an invention for—"Improvements in galleries or supports for gas shades." *Letters Patent sealed.*

PRICE. 13th September 1860.

2211. GEORGE PRICE, of Wolverhampton, in the County of Stafford, Iron Safe and Lock Manufacturer, for an invention for—"An improvement in the manufacture of wrought iron drill-proof safes." *Provisional protection only.*

CHESTERTON. 13th September 1860.

2212. JOSEPH CHESTERTON, of Leicester, Jeweller, for an invention for—"A new or improved method of constructing portable buildings." *Letters Patent sealed.*

FIELD. 13th September 1860.

2213. EDWARD FIELD, of 18, Carlisle Street, Soho Square, in the County of Middlesex, Hair Dresser and Perfumer, for an invention for—"A covering for the moustache or hairy parts of the face." *Letters Patent sealed.*

MURTON. MILLINGTON. 13th September 1860.

2214. FREDERICK MICHAEL MURTON, of Strood, in the County of Kent, Engineer, and JONATHAN MILLINGTON, also of Strood, aforesaid, in the County of Kent, Foreman to the said Frederick Michael Murton, for an invention for—"Improvements in throttle and expansion valves for engines worked by steam or other vapour, or by liquids or gases." *Letters Patent sealed.*

SOMERVILLE. 13th September 1860.

2215. WALLACE COCHRANE SOMERVILLE, of 13, Upper Albany Street, Regent's Park, in the County of Middlesex, Civil Engineer, for an invention for—"Improvements in apparatus for supplying locomotive tenders with water."
Letters Patent sealed.

DAVIES. 13th September 1860.

2216. GEORGE DAVIES, of No. 1, Serle Street, Lincoln's Inn, in the County of Middlesex, and of No. 28, St. Enoch Square, in the City of Glasgow, Civil Engineer and Patent Agent, for an invention for—"Improvements in the processes of cementation or case hardening and softening iron."—*A communication to him from abroad by Jules Cazanave, of Paris, Manufacturer.* *Letters Patent sealed.*

ROSINSKY. 13th September 1860.

2217. NICOLAS ROSINSKY, of the Society for the fabrication of Czar Soap, Russian Cosmetics, Yolk Oil, and Albumen, 32, near the Triumphal Gate of Moscow, St. Petersburgh, Russia, for an invention for—"A new kind of oil for cosmetics, soaps, and other like articles for the toilet." *Letters Patent sealed.*

CALVERT. 14th September 1860.

2218. FRANCIS ALTON CALVERT, of the City of Manchester, Engineer, for an invention for—"Improvements in steam-engines and boilers, and in valves for steam and other fluids." *Letters Patent sealed.*

SCHEITHAUER. 14th September 1860.

2219. FERDINAND SCHEITHAUER, of Vienna (Austria), Gentleman, for an invention for—"An improved machine for printing calico and other fabrics."
Letters Patent sealed.

LAUNAY. DE VERNEZ. 14th September 1860.

2220. CHARLES THEODULE LAUNAY, and AUGUSTE MARIE ALEXANDRE DOMINÉ DE VERNEZ, both of Paris, France, Gentlemen, for an invention for—"Improvements in treating coal-naphtha, and in apparatus employed therein."
Letters Patent sealed.

COOKE. 14th September 1860.

2221. JAMES COOKE, of the City of Manchester, in the County of Lancaster, late of Belfast, Ireland, Gas Singer, for an invention for—"Improvements in singeing, treating or finishing textile fabrics, yarns, felts and other similar materials."
Letters Patent sealed.

BURRELL. 14th September 1860.

2222. JOHN BURRELL, of Norwich, in the County of Norfolk, Manufacturer, for an invention for—"Improvements in the manufacture of woven materials applicable as crinoline and other articles of ladies' dress." *Provisional protection only.*

BURDESS. 14th September 1860.

2223. ADAM BURDESS, of Spon Street, Coventry, in the County of Warwick, Watch Manufacturer, for an invention for—"Improvements in railway brakes."
Letters Patent sealed.

JOHNSON. 14th September 1860.

2224. JOHN HENRY JOHNSON, of 47, Lincoln's Inn Fields, in the County of Middlesex, and of 166, Buchanan Street, in the City of Glasgow, North Britain, Gentleman, for an invention for—"Improvements in apparatus for raising or lowering and weighing heavy bodies."—*A communication to him from abroad by Louis Vernay, of Paris, in the Empire of France, Wine Merchant.* *Letters Patent sealed.*

PETRIE. 14th September 1860.

2225. JAMES PETRIE, of Rochdale, in the County of Lancaster, Engineer, for an invention for—"Improvements in steam-boilers." *Letters Patent sealed.*

TURNER. 14th September 1860.

2226. LUKE TURNER, of Leicester, Elastic Fabric Manufacturer, for an invention for,—"Improvements in the manufacture of elastic fabrics." *Provisional protection only.*

TILL. 14th September 1860.

2227. THOMAS TILL, of Birmingham, in the County of Warwick, Machinist, for an invention for—"Certain improvements in machinery for making nails, applicable in particular to the making of that description of nails called 'Horse nails.'" *Provisional protection only.*

PAUTARD. 14th September 1860.

2228. PAUL PAUTARD, of Castres, Tarn, in the French Empire, Civil Engineer, for an invention for—"An improved apparatus for supplying air to persons in water and in mines or other places."—*A communication to him by Benoit Rouquayrol, Engineer, resident at Firmy (French Empire).* *Letters Patent sealed.*

BEDDAT. 14th September 1860.

2229. PIERRE ANDRÉ BEDDAT, of No. 53, Place Imperiale, in the City of Lyons, in the Empire of France, Gentleman, for an invention for—"A new propeller." *Provisional protection only.*

DÜSTERWALD. 14th September 1860.

2230. JOSEPH PIERRE DÜSTERWALD, of Ixelles, near Brussels, in the Kingdom of Belgium, for an invention for—"An improved forcing pump for raising beer and other liquids." *Provisional protection only.*

GEDGE. 14th September 1860.

2231. WILLIAM EDWARD GEDGE, of the firm of John Gedge and Son, No. 11, Wellington Street, Strand, in the County of Middlesex, Patent Agent, for an invention for—"Apparatus for goffering felt or cloth hats or other analogous articles."—*A communication to him from abroad by François Munier, fils, of Quillan, Department of the Aube, France, Hat Manufacturer.* *Letters Patent sealed.*

GEDGE. 14th September 1860.

2232. WILLIAM EDWARD GEDGE, of the firm of John Gedge and Son, of No. 11, Wellington Street, Strand, in the County of Middlesex, Patent Agent, for an invention for—"Improvements in ornamenting glass with colored designs or pictures in imitation of stained or painted glass."—*A communication to him from abroad by Jules Bénèche, of Elbeuf, Seine Inférieure, France, Gentleman.* *Provisional protection only.*

MUSHET. 14th September 1860.

2233. ROBERT MUSHET, of Coleford, in the County of Gloucester, Metallurgist, for an invention for—"An improvement or improvements in the manufacture of cast steel." *Letters Patent sealed.*

HALL. 14th September 1860.

2234. NATHANIEL RICHARD HALL, of Northfleet, in the County of Kent, for an invention for—"Improved apparatus for winding up clocks or timekeepers." *Provisional protection only.*

HENRY. 14th September 1860.

2235. MICHAEL HENRY, of 84, Fleet Street, in the City of London, Patent Agent, for an invention for—"The employment of a certain sorting process for silk and other fibrous materials, and an apparatus for the purpose of performing the same."—*A communication to him from abroad by Pierre Raimond Huguet, of 33, Boulevard St. Martin, Paris.* *Letters Patent sealed.*

SCHNELL. 15th September 1860.

2236. WILLIAM SCHNELL, of the Strand, London, County of Middlesex, Upholsterer, for an invention for—"Improvements in the manufacture of lucifer matches." *Provisional protection only.*

DAVIES. ALLEN. 15th September 1860.

2237. DAVID DAVIES, of the City of Manchester, Engineer, and JAMES ALLEN, of the same place, Brassfounder, for an invention for—"Improvements in apparatus for preventing the explosion of steam-boilers." *Letters Patent sealed.*

TRONCHON. 15th September 1860.

2238. ALFRED TRONCHON, of 2, Rue Sainte Appoline, Paris (France), and of 4, South Street, Finsbury, Merchant, for an invention for—"Improvements in constructing iron and cast-iron dwelling-houses." *Letters Patent sealed.*

WAINWRIGHT. BRADBURY. 15th September 1860.

2239. GEORGE JAMES WAINWRIGHT, and CHARLES TIMOTHY BRADBURY, of Dukinfield, in the County of Chester, Manufacturers, for an invention for—"Improvements in the manufacture of damasks and similar fancy goods." *Letters Patent sealed.*

BURKE. 15th September 1860.

2240. MICHAEL BURKE, of Gilbert Street, Liverpool, in the County of Lancaster, for an invention for—"An improved spring sacking or foundation for a bed, mattrass or other like article, especially adapted for ships' use, barracks, hospitals and military camps, applicable also for domestic dwellings." *Letters Patent sealed*

DAVIES. 15th September 1860.

2241. GEORGE DAVIES, of No. 1, Serle Street, Lincoln's Inn, in the County of Middlesex, and No. 28, St. Enoch Square, in the City of Glasgow, Civil Engineer and Patent Agent, for an invention for—"Improvements in lamps for burning coal oil and other like combustible fluids, part of which improvements is applicable to gas fittings."—*A communication to him from abroad by J. T. Van Kirk, of Philadelphia in the United States of America.* *Letters Patent sealed.*

BRADBURY. KING. 15th September 1860.

2242. GEORGE FRANCIS BRADBURY, of Oldham, in the County of Lancaster, Machine Maker, and JOSEPH JACKSON KING, of Glasgow, in the County of Lanark, North Britain, Warehouseman, for an invention for—Improvements in binding and folding guides employed in sewing-machines." *Provisional protection only.*

HORSEY. 15th September 1860.

2243. JAMES HORSEY, of Belvedere Road, in the County of Surrey, India-rubber Manufacturer, for an invention for—"Improvements in india-rubber teats." *Letters Patent sealed.*

SEILER. 15th September 1860.

2244. FREDÉRIC SEILER, of Paris, in the French Empire, Engineer, for an invention for—"Improvements in compressing air or other gas, which may be transferred by tubes for raising water and for various other purposes." *Letters Patent sealed.*

RUMBOLD. 15th September 1860.

2245. WILLIAM RUMBOLD, Architect, of St. Louis, Missouri, in the United States of America, for an invention for—"An improved mode of constructing domes." *Provisional protection only.*

GEDGE. 15th September 1860.

2246. WILLIAM EDWARD GEDGE, of the firm of John Gedge and Son, of No. 11, Wellington Street, Strand, in the County of Middlesex, Patent Agent, for an invention for—"Improvements in the manufacture of manure."—*A communication to him from abroad by Emile Avice, of Orléans, France, Manure Manufacturer.* *Provisional protection only.*

NAPIER. 15th September 1860.

2247. JAMES MURDOCH NAPIER, of York Road, Lambeth, Engineer, for an invention for—"Improvements in machinery for the manufacture of sugar." *Letters Patent sealed.*

BARNETT. 15th September 1860.

2248. THOMAS BARNETT, of Oldham, in the County of Lancaster, Engineer, for an invention for—"Improvements in high-pressure steam-engines." *Letters Patent sealed.*

BARNWELL. ROLLASON. 15th September 1860.

2249. STEPHEN BARNWELL, of Coventry, in the County of Warwick, Manufacturer, and ALEXANDER ROLLASON, of the same place, Chemist, for an invention for—"Improvements in combining and mixing certain solutions of pyroxylene with animal, mineral and vegetable substances, by which its quality is altered in such manner as to produce hard, resistent, adhesive, plastic or resilient compounds and articles unalterable in their nature and varied in colour, which said compounds in a state of solution may also be advantageously employed as paints or varnish." *Letters Patent sealed.*

NEWTON. 15th September 1860.

2250. WILLIAM EDWARD NEWTON, of the Office for Patents, 66, Chancery Lane, in the County of Middlesex, Civil Engineer, for an invention for—"Improvements in safety locks."—*A communication to him from abroad by Edouard Louis Poirier, of Paris, in the Empire of France.* *Letters Patent sealed.*

NEWTON. 15th September 1860.

2251. ALFRED VINCENT NEWTON, of the Office for Patents, 66, Chancery Lane, in the County of Middlesex, Mechanical Draughtsman, for an invention for—"An improvement in the construction of brooms."—*A communication to him from abroad by William H. Towers, of the City of New York, United States of America.* *Letters Patent sealed.*

STEVENS. 17th September 1860.

2252. CHARLES STEVENS, Manager of the British & Foreign Office for Patents, 18, Wellbeck Street, Cavendish Square, in the County of Middlesex, for an invention for—"A new medico-chirurgical bleeding instrument."—*A communication to him from abroad by Baudouin & Guérin de Tencin, of Paris, in the Empire of France.* *Provisional protection only.*

HANSOR.
17th September 1860.

2253. JAMES HANSOR, of No. 2, Portland Place, Wandsworth Road, in the Borough of Lambeth, in the County of Surrey, Practical Chymist, for an invention for—"Improvements in the manufacture of coal gas." *Letters Patent sealed.*

BETTS.
17th September 1860.

2254. JOSEPH EDWARD BETTS, of the Drapery, in the Town and County of Northampton, for an invention for—"An improved machine for cutting out clothing." *Provisional protection only.*

WALSH.
17th September 1860.

2255. JOHN HENRY WALSH, of Kensington, in the County of Middlesex, for an invention for—"Improvements in breech-loading firearms." *Letters Patent sealed.*

ZYSEL.
17th September 1860.

2256. FRANCIS ZYSEL, of No. 28, Great Pearl Street, Shoreditch, in the County of Middlesex, Jeweller, for an invention for—"Improvements in the construction of studs or fastenings for shirt-fronts and other articles of dress." *Provisional protection only.*

SMITH.
17th September 1860.

2257. GEORGE FREDERICK SMITH, of 15, Golden Square, in the County of Middlesex, Solicitor, for an invention for—"Improvements in the smelting of iron and other ores."—*A communication to him from abroad by Robert William Sievier, of Upper Holloway, in the County of Middlesex, but now residing in the City of Hamburgh.* *Letters Patent sealed.*

TEULON.
17th September 1860.

2258. WILLIAM HENSMAN TEULON, of Cooper's Row, Tower Hill, in the City of London, for an invention for—"Improvements in brewing and in apparatus employed therein."—*A communication to him from abroad by Anton Christopher Ludwig Reinhardt, of Mannheim.* *Letters Patent sealed.*

HAY.
17th September 1860.

2259. JOHN HAY, of Salford, near Manchester, in the County of Lancaster, Mechanic, for an invention for—"Improvements in machinery or apparatus for making gas burners." *Provisional protection only.*

NEWTON.
17th September 1860.

2260. WILLIAM EDWARD NEWTON, of the Office for Patents, 66, Chancery Lane, in the County of Middlesex, Civil Engineer, for an invention for—"Improvements in lanterns."—*A communication to him from abroad by Nathaniel Tufts, Junior, of Boston, Augustus Tufts, of Malden, Middlesex County, Massachusetts, and Simon G. Cheever, of Boston, all in the United States of America.* *Letters Patent sealed.*

NEWTON.
17th September 1860.

2261. WILLIAM EDWARD NEWTON, of the Office for Patents, 66, Chancery Lane, in the County of Middlesex, Civil Engineer, for an invention for—"Improvements in the manufacture of files."—*A communication to him from abroad by William P. Pierce, of Boston, in the State of Massachusetts, and United States of America.* *Letters Patent sealed.*

GROUT.
17th September 1860.

2262. GEORGE GROUT, of Wood Green, Tottenham, in the County of Middlesex, Gentleman, for an invention for—"Improved machinery for manufacturing elastic cord." *Provisional protection only.*

CRAWFORD.
17th September 1860.

2263. ROBERT CRAWFORD, of Beith, in the County of Ayr, North Britain, Merchant, for an invention for—"Improvements in machinery or apparatus for weaving figured or plain fabrics." *Provisional protection only.*

STEAD.
GLEDHILL.
18th September 1860.

2264. HORATIO STEAD, of the firm of Elkanah Hoyle and Sons, of Halifax, in the County of York, Millwrights, and HENRY GLEDHILL, of the same place, Stuff-Finisher, for an invention for—"Improvements in finishing textile fabrics and in the means or apparatus employed therein." *Letters Patent sealed.*

GOLDEN.
18th September 1860.

2265. CHARLES GOLDEN, of Bradford, in the County of York, Gunmaker, for an invention for—"Improvements in breech-loading fire-arms and in projectiles." *Provisional protection only.*

HUGHES.
18th September 1860.

2266. EDWARD JOSEPH HUGHES, of the firm of Hughes & Son, Patent Agents, 123, Chancery Lane, London, W.C., for an invention for—"Improvements in brewing malt liquors and in apparatus employed therein."—*A communication to him from abroad by Joseph Charles Heyndrickx-Percy, of Saint Nicolas, in the Kingdom of Belgium, Brewer, and John Francis Vandenhove, of Ghent, Belgium, Brewer.* *Letters Patent sealed.*

STRATHEARN.
18th September 1860.

2267. JOHN STRATHEARN, of Glasgow in the County of Lanark, North Britain, Mechanic, for an invention for—"Improvements in preparing cotton and other fibrous materials for spinning." *Provisional protection only.*

CULLIS.
18th September 1860.

2268. WILLIAM CULLIS, of Number Four, High Street, Homerton, in the parish of Hackney, in the County of Middlesex, Gentleman, for an invention for—"Improvements in stoppering or closing bottles, jars and other like vessels."
Provisional protection only.

NEWTON.
18th September 1860.

2269. WILLIAM EDWARD NEWTON, of the Office for Patents, 66, Chancery Lane, in the County of Middlesex, Civil Engineer, for an invention for—"Improvements in gas meters."—*A communication to him from abroad by Nathaniel Tufts, Junior, of Boston, Augustus Tufts, of Malden, Middlesex County, and Simon G. Cheever, of Boston, all in the State of Massachusetts, and United States of America. Letters Patent sealed.*

MILLER.
18th September 1860.

2270. DANIEL MILLER, of Glasgow, in the County of Lanark, North Britain, Civil Engineer, for an invention for—"Improvements in the mode of constructing breakwaters, piers, quays, sea walls, and the submarine works of fortifications."
Letters Patent sealed.

OWEN.
18th September 1860.

2271. GRIFFITH OWEN, of Boston Lodge, in the County of Merioneth, Engineer, for an invention for—"Improvements in the construction of sawing-machines."
Letters Patent sealed.

REECE.
18th September 1860.

2272. REES REECE, of Llandilo, in the County of Carmarthen, Chemist, for an invention for—"Improvements in treating lignite and certain bituminous mineral substances so as to obtain products therefrom." *Letters Patent sealed.*

COLE.
18th September 1860.

2273. RICHARD JOHN COLE, of 11, Pembridge Gardens, Bayswater, in the County of Middlesex, Esquire, for an invention for—"Ornamenting the external walls of houses and buildings." *Letters Patent sealed.*

HOLGATE.
19th September 1860.

2274. WILLIAM HOLGATE, of Burnley, in the County of Lancaster, Engineer, for an invention for—"An improved beaming frame." *Provisional protection only.*

HUNT.
19th September 1860.

2275. EDMUND HUNT, of Glasgow, in the County of Lanark, North Britain, Consulting Engineer and Patent Agent, for an invention for—"Improved apparatus for preparing saws."—*A communication to him from abroad by Theodor Andreas Prale, residing at Hamburgh.* *Provisional protection only.*

CALVERT.
19th September 1860.

2276. FRANCIS ALTON CALVERT, of the City of Manchester, Engineer, for an invention for—"Improvements in machinery and apparatus for opening, burring, cleaning and carding cotton and other fibrous materials, part of which is applicable to opening twisted yarns and woven fabrics." *Letters Patent sealed.*

COLE.
19th September 1860.

2277. RICHARD JOHN COLE, of No. 11, Pembridge Gardens, Bayswater, in the County of Middlesex, Esquire, for an invention for—"Improvements in the manufacture of brushes." *Letters Patent sealed.*

CRAWFORD.
19th September 1860.

2278. ROBERT CRAWFORD, of Beith, in the County of Ayr, North Britain, Merchant, for an invention for—"Improvements in apparatus for conveying communications from one place to another." *Provisional protection only.*

MARTIN.
GUDIN.
19th September 1860.

2279. EMILE MARTIN, of 16, Rue d'Antin, Lille, and THEODORE GUDIN, of 20, Rue Balzac, Paris, for an invention for—"Improvements in apparatus for manufacturing gas when dissolving zinc or iron in dilute sulphuric or other acid."
Provisional protection only.

SAUTTER.
19th September 1860.

2280. MAURICE SAUTTER, of No. 14, Boulevart Montmartre, in the City of Paris, Banker, for an invention for—"Improvements in generating and applying steam as a motive-power, and in apparatus employed for these purposes."—*A communication to him by Mr. Joseph Gill, Gentleman, resident at Marsala, Sicily.*
Letters Patent sealed.

ZORN.
19th September 1860.

2281. FRIEDRICH WILHELM JULIUS ZORN, of London Wall, in the City of London, Merchant, for an invention for—"Improved apparatus for charging and closing the ends of cartridges."—*A communication to him from abroad by Mr. Henry Genhardt, of Liège, in the Kingdom of Belgium.* *Provisional protection only.*

GREENWOOD.
19th September 1860.

2282. THOMAS GREENWOOD, of Leeds, in the County of York, Machine Maker, for an invention for—"An improved mode of and apparatus for manufacturing files."
Letters Patent sealed.

SIMON.
19th September 1860.

2283. MAXIMILIAN SIMON, of Little Moor Fields, in the County of Middlesex, Manufacturer, for an invention for—"An improvement in sewing-machines."
Provisional protection only.

JONES.
20th September 1860.

2284. DAVID JONES, of Machen, Newport, County of Monmouth, Civil Engineer, for an invention for—"An improved method of and apparatus for raising water and other liquids." *Provisional protection only.*

WILLIAMSON.
PERKINS.
20th September 1860.

2285. ALEXANDER WILLIAM WILLIAMSON, of University College, in the County of Middlesex, and LOFTUS PERKINS, of Francis Street, Gray's Inn Road, in the County of Middlesex, for an invention for—"Improvements in surface condensers." *Letters Patent sealed.*

OLDHAM.
20th September 1860.

2286. JOHN OLDHAM. of Derby, in the County of Derby, Commission Agent, for an invention for—"An improvement in machinery for pulping turnips and other roots." *Provisional protection only.*

BRIGGS.
20th September 1860.

2287. THOMAS BRIGGS, of Salford, in the County of Lancaster, Oil Cloth Manufacturer, for an invention for—"Certain improvements in the manufacture of oil cloth or oil paper to be employed for packing purposes or for coating or covering surfaces, and in apparatus connected therewith." *Letters Patent sealed.*

KUNSTMANN.
20th September 1860.

2288. ROBERT KUNSTMANN, of Manchester, in the County of Lancaster, Engineer, for an invention for—"An improved apparatus for lubricating the frictional surfaces of machinery."—*A communication to him from abroad by Thomas Rominger, Manager, at Hof, Bavaria.* *Provisional protection only.*

TAYLOR.
20th September 1860.

2289. JOHN HENRY TAYLOR, of Lee Terrace, Blackheath, in the County of Kent, a Captain in the Merchant's Service, for an invention for—"Improved apparatus for lowering ships' boats and disengaging same from the tackles." *Letters Patent sealed.*

LAURENT.
20th September 1860.

2290. VICTOR HIPPOLYTE LAURENT, of Plancher-les-Mines, Département de la Haute Saone, France, Engineer, for an invention for—"Improvements in machinery or apparatus for forging nails, screws, bolts, rivets, and railway spikes." *Letters Patent sealed.*

BROOMAN.
20th September 1860.

2291. RICHARD ARCHIBALD BROOMAN, of 166, Fleet Street, in the City of London, Patent Agent, for an invention for—"Improvements in machinery for printing shawls and other fabrics."—*A communication to him from abroad by Ignace Michel Firnstahl, of Vienna.* *Letters Patent sealed.*

CASH.
CASH.
20th September 1860.

2292. JOHN CASH, and JOSEPH CASH, the younger, both of the City of Coventry, Manufacturers, for an invention for—"An improvement in the manufacture of frillings to be applied to wearing apparel." *Letters Patent sealed.*

ARNOLD.
ARNOLD.
20th September 1860.

2293. GEORGE ARNOLD, and GEORGE ARNOLD, Junior, both of Penton Place, Kennington, in the County of Surrey, Skirt Manufacturers, for an invention for—"Improvements in elastic skirts for distending ladies' dresses." *Provisional protection only.*

COCKER.
20th September 1860.

2294. JAMES COCKER, of Liverpool, in the County of Lancaster, Wire Drawer, for an invention for—"An improved construction of packing case." *Provisional protection only.*

WESTHORP.
20th September 1860.

2295. THEOPHILUS WESTHORP, of Manor House, Poplar, Ship Chandler, for an invention for—"Improvements in the manufacture of oakum." *Letters Patent sealed.*

RICHARDSON.
PRENTICE.
20th September 1860.

2296. THOMAS RICHARDSON, of Newcastle-upon-Tyne, Manufacturer, and MANNING PRENTICE, of Stowmarket, Suffolk, Manufacturer, for an invention for—"Improvements in treating phosphotic matters and in obtaining products therefrom." *Letters Patent sealed.*

MORLEY.
20th September 1860.

2297. JOSEPH ROBERTS MORLEY, of Woodbridge, in the County of Suffolk, for an invention for—"Improvements in the manufacture of baking-dishes." *Letters Patent sealed.*

MUSHET.
20th September 1860.

2298. ROBERT MUSHET, of Coleford, in the County of Gloucester, Metallurgist, for an invention for—"The manufacture of a new or improved metallic alloy." *Letters Patent sealed.*

RICHARDSON.
21st September 1860.

2299. THOMAS RICHARDSON, of Newcastle-upon-Tyne, for an invention for—"Improvements in the treatment of bones and in the manufacture of paper." *Provisional protection only.*

MURRAY.
21st September 1860.

2300. DAVID MURRAY, of the City of Norwich, in the County of Norfolk, Weaver, for an invention for—"Improvements in means or apparatus used in weaving."
Letters Patent sealed.

ROGERS.
21st September 1860.

2301. CALVIN B. ROGERS, of Deep River, State of Connecticut, U.S. of America, and now residing at No. 13, East Street, Red Lion Square, W.C., London, for an invention for—"An improved floor skate."—*A communication to him from abroad by Reuben Shaler, of Madison, County of New Haven, and State of Connecticut, United States of America.* *Letters Patent sealed.*

TRINQUIER.
21st September 1860.

2302. AUGUSTE ARMAND TRINQUIER, of Paris, France, Lieutenant in the French Army, for an invention for—"Improvements in surveying instruments."
Letters Patent sealed.

SMITH.
21st September 1860.

2303. ROBERT SMITH, of Islington, in the Borough of Finsbury, Ship Owner, for an invention for—"Covering of iron, wooden ships, yachts, steam boats, and barges bottoms and outside." *Letters Patent sealed.*

FISHER.
21st September 1860.

2304. JOHN FISHER, of Carrington, Nottingham, Lace-Manufacturer, for an invention for—"Improvements in machinery or apparatus for treating clothes and other articles whilst in a wet condition, for the purpose of drying or partially drying the same." *Provisional protection only.*

MARTIN.
21st September 1860.

2305. THOMAS MARTIN, of Manchester, in the County of Lancaster, Mill-wright, for an invention for—"An improved method of connecting and disconnecting pipes or tubes." *Provisional protection only.*

SKINNER.
MILLER.
21st September 1860.

2306. HENRY EDWARD SKINNER, and WILLIAM HENRY MILLER, both of Shadwell, in the County of Middlesex, Engineers, for an invention for—"Improvements in cranes and other lifting apparatus." *Letters Patent sealed.*

CAMPBELL.
21st September 1860.

2307. JAMES CAMPBELL, of No. 44, Adelaide Road, Haverstock Hill, in the County of Middlesex, Ship Builder, for an invention for—"A chambered floating dry dock." *Letters Patent sealed.*

NEWTON.
21st September 1860.

2308. WILLIAM EDWARD NEWTON, of the Office for Patents, 66, Chancery Lane, in the County of Middlesex, Civil Engineer, for an invention for—"Improvements in rotary engines and rotary pumps."—*A communication to him from abroad by Kenyon Cox, and Theodore Cox, both of New York City.* *Letters Patent sealed.*

NEWTON.
21st September 1860.

2309. ALFRED VINCENT NEWTON, of the Office for Patents, 66, Chancery Lane, in the County of Middlesex, Mechanical Draughtsman, for an invention for—"An improved mode of producing relief printing plates, blocks and cylinders."—*A communication to him from abroad by De Witt Clinton Hitchcock, Edwin Blake Larchar, Edwin Metcalf Larchar, James Smith Talbot, and William Scudder Tisdale, all of the United States of America.* *Letters Patent sealed.*

FALLOWS.
WILD.
22nd September 1860.

2310. THOMAS FALLOWS, of Farnworth, near Bolton-le-Moors, in the County of Lancaster, Spindle Maker, and RICHARD WILD, of Bolton-le-Moors, aforesaid, Ironmonger, for an invention for—"Improvements in fasteners for window sashes."
Letters Patent sealed; no specification filed.

WELLS.
22nd September 1860.

2311. JOHN HOWELL WELLS, of Brooklyn, in the County of Kings, and State of New York, in the United States of America, for an invention for—"Improvements in rocking chairs." *Letters Patent sealed.*

TOMLINSON.
22nd September 1860.

2312. JOHN TOMLINSON, of the Town and County of the Town of Nottingham, Police Constable, for an invention for—"Improvements in fire-engines."
Letters Patent sealed.

GRIFFITHS.
22nd September 1860.

2313. THOMAS GRIFFITHS, of Birmingham, in the County of Warwick, Manufacturer, for an invention for—"A new or improved pulley for window and other blinds." *Provisional protection only.*

ASH.
PETIT.
22nd September 1860.

2314. ROBERT ASH, of Birmingham, in the County of Warwick, Manufacturer, and JOSEPH LETIERE PETIT, of Birmingham, aforesaid, Manufacturer, for an invention for—"Improvements in metallic pens and penholders."
Provisional protection only.

ROWLEY.
22nd September 1860.

2315. JOHN JEPHSON ROWLEY, of Rowthorne, near Chesterfield, Derbyshire, for an invention for—"Improvements in machinery for cutting or clipping hedges."
Letters Patent sealed.

TUCK.
22nd September 1860.

2316. JOSEPH HENRY TUCK, of Great George Street, Westminster, for an invention for—"Improvements in air pumps and in machinery for actuating the same."
Letters Patent sealed.

BUDDEN.
22nd September 1860.

2317. JOHN LEGGETT BUDDEN, of 48, Fenchurch Street, in the City of London, Merchant, for an invention for—"Improvements in the application of steam or highly rarefied gas or other aëriform fluid to obtain motive-power for propelling and other purposes."—*A communication to him from abroad by Woodford Pilkington, Civil Engineer, of the Cape of Good Hope.* *Letters Patent sealed.*

BARKER.
22nd September 1860.

2318. EDWARD BRUCE BOUGHTON BARKER, of Bayswater, in the County of Middlesex, Gentleman, for an invention for—"Improvements in apparatus for raising or forcing water or other fluids." *Letters Patent sealed.*

GASKILL.
24th September 1860.

2319. EDWIN GASKILL, of 10, Sermon Lane, Godliman St., Doctors Commons, in the City of London, for an invention for—"The application of a traversing set off sheet to gripper printing machines of all kinds." *Provisional protection only.*

PARSONS.
24th September 1860.

2320. GEORGE PARSONS, of No. 1, Duke St., Finsbury, in the County of Middlesex, for an invention for—"Certain improvements in breaks for railway carriages."
Provisional protection only.

HINE.
24th September 1860.

2321. JOSEPH HINE, of Clerkenwell, in the County of Middlesex, Fancy Cabinet Manufacturer, for an invention for—"Improvements in markers for billiards, cricket, whist, or other games of skill or chance, a modification of which is also applicable for indicating years, months, days, and dates." *Provisional protection only.*

JOHNSON.
24th September 1860.

2322. JOHN HENRY JOHNSON, of 47, Lincoln's Inn Fields, in the County of Middlesex, and of 166, Buchanan Street, in the City of Glasgow, North Britain, Gentleman, for an invention for—"Improvements in machinery or apparatus for washing and wringing clothes and similar articles."—*A communication to him from abroad by Josee Johnson, and Elliott Dickerman, both of the City of New York, in the United States of America.* *Letters Patent sealed.*

BATCHELOR.
24th September 1860.

2323. HENRY BATCHELOR, of 34, Southampton Buildings, Chancery Lane, in the County of Middlesex, Manufacturer, for an invention for—"Improvements in the apparatus and means employed for the production of geometric or ornamental figures or designs." *Provisional protection only.*

VAVASSEUR.
25th September 1860.

2324. JOSIAH VAVASSEUR, of 28, Gravel Lane, Southwark, in the County of Surrey, Engineer, for an invention for—"Improvements in machinery for rolling or polishing leather." *Letters Patent sealed.*

KIND.
25th September 1860.

2325. CARL KIND, of No. 50, George Grove, Holloway, in the County of Middlesex, Piano-forte Maker, for an invention for—"Improvements in pianofortes."
Letters Patent sealed.

HAWORTH.
25th September 1860.

2326. JOHN HAWORTH, of Thorncliffe, Old Trafford, near the City of Manchester, Gentleman, for an invention for—"Improvements in tramways for streets and ordinary roads, and in carriages for running thereon." *Letters Patent sealed.*

PORTER.
25th September 1860.

2327. JOHN ROBINSON PORTER, of 47, Wood Street, in the City of London, Merchant, for an invention for—"Improvements in axles for railway carriages and other purposes."—*A communication to him from abroad by Henry Porter, and William Edward Jones, both of Bahia, in the Empire of Brazil, Engineers.*
Provisional protection only

MANNIX.
25th September 1860.

2328. JAMES BALL MANNIX, of London, in the County of Middlesex, Civil Engineer, for an invention for—"An improved wheel to be used for carriages or other purposes." *Provisional protection only.*

COLLIER.
25th September 1860.

2329. EDWARD COLLIER, of Myddleton Street, Clerkenwell, in the County of Middlesex, Surgical Instrument Maker, for an invention for—"Improvements in respirators." *Provisional protection only*

GOSSAGE.
25th September 1860.

2330. WILLIAM GOSSAGE, of Widnes, in the County of Lancaster, Chemist, for an invention for—"Improvements in the manufacture of certain kinds of soap."
Provisional protection only.

GEOGHEGAN.
25th September 1860.

2331. ROBERT GEOGHEGAN, of James Street Brewery, in the City of Dublin, for an invention for—"Improvements in machinery or apparatus for expressing liquids from various substances." *Letters Patent sealed.*

FERRABEE. FERRABEE. 26th September 1860.

2332. JAMES FERRABEE, of Phœnix Iron Works, Stroud, in the County of Gloucester, Engineer, and HENRY FERRABEE, of Camberwell, in the County of Surrey, Agent, for an invention for—"Improvements in apparatus for lighting, heating, ventilating and cooking by gas, and part of which invention is applicable to heating apparatuses of other descriptions." *Provisional protection only.*

TRUSS. 26th September 1860.

2333. THOMAS SEAVILLE TRUSS, of Number 53, Gracechurch Street, in the City of London, and of Number 2, Grove Terrace, Plaistow, in the County of Essex, Civil Engineer, for an invention for—"Improvements in apparatus for the traction and propulsion of ships, boats, and other nautical vessels." *Letters Patent sealed; no specification filed.*

HOLLIS. 26th September 1860.

2334. WILLIAM HOLLIS, of No. 6, Railway Arches, Victoria Station, Sheffield, in the County of York, Mineral Grinder, for an invention for—"An improved composition for steel moulders." *Provisional protection only.*

HARGREAVES. 26th September 1860.

2335. WALMSLEY HARGREAVES, of Crawshaw Booth, near Rawtenstall, in the County of Lancaster, Gentleman, for an invention for—"Improvements in machinery or apparatus for washing woven fabrics." *Letters Patent sealed.*

BURN. 26th September 1860.

2336. CHARLES BURN, of Delahay Street, Westminster, Civil Engineer, for an invention for—"Improvements in the tram-rails of street railways to prevent horses slipping thereon." *Letters Patent sealed.*

BURN. 26th September 1860.

2337. CHARLES BURN, of Delahay Street, Westminster, Civil Engineer, for an invention for—"An improved tram-rail for street railways." *Letters Patent sealed.*

DAEHNE. 26th September 1860.

2338. FRIEDERICH WILHELM DAEHNE, of Swansea, Glamorganshire, Gentleman, for an invention for—"Improvements in extracting copper from ores." *Letters Patent sealed.*

BOULTON. 26th September 1860.

2339. WILLIAM BOULTON, Iron and Brass Founder, of Burslem, in the County of Stafford, for an invention for—"An improvement in the construction of potters' drying stoves and workshops, and in apparatus for preparing the clay for the moulds used by the potter so as to render the process of drying more effectual." *Provisional protection only.*

M'CROSSAN. 26th September 1860.

2340. JOSEPH M'CROSSAN, of Glasgow, in the County of Lanark, North Britain, Merchant, for an invention for—"Improvements in sewing-machines."—*A communication to him from abroad by George Juengst, residing at New York.* *Letters Patent sealed.*

MACNAB. 26th September 1860.

2341. WILLIAM MACNAB, of Greenock, in the County of Renfrew, North Britain, Engineer, for an invention for—"Improvements in steam-engines and boilers." *Letters Patent sealed.*

BUCHHOLZ. 26th September 1860.

2342. LUDWIG BUCHHOLZ, of Gottenburg, Sweden, but now residing at Manchester, in the County of Lancaster, Merchant, for an invention for—"Improvements in carbonizing saw dust and other finely divided vegetable substances, and in obtaining certain useful products by such carbonization, and in apparatus connected therewith." *Provisional protection only.*

BROWN. JEFFERY. 27th September 1860.

2343. WILLIAM FULFORD BROWN, of Westgate Street, Gloucester, and WALTER JEFFERY, of Eastgate Street, Gloucester, for an invention for—"A more convenient and effectual method of attaching and securing brooches and such like articles, and for improved fastenings to be used therewith and for other purposes." *Provisional protection only.*

BROOKES. ADAMS. 27th September 1860.

2344. THOMAS BROOKES, of Birmingham, in the County of Warwick, Manufacturer, and THOMAS ADAMS, of Birmingham, aforesaid, Manufacturer, for an invention for—"An improvement or improvements in the manufacture of the joints of brooches and other similar dress fastenings." *Letters Patent sealed.*

MENNONS. 27th September 1860.

2345. MARC ANTOINE FRANCOIS MENNONS, of the British and Foreign Patent Offices, 39, Rue de l'Echiquier, Paris, in the Empire of France, for an invention for—"Improved processes for dyeing or printing with certain products of aniline on cotton and other textile matters of vegetable origin."—*A communication from J. C. Guigon, a person resident at Lyons (Dept. du Rhône), in France.* *Provisional protection only.*

TAYLOR.
27th September 1860.

2346. JOSEPH JEPSON ODDY TAYLOR, of No. 12, Mark Lane, in the City of London, Naval Engineer, for an invention for—"An improved composition for vessels, furnaces and other apparatus to be exposed to the operation of great heat and the effect of fluxes and the like." *Letters Patent sealed.*

JOHNSON.
27th September 1860.

2347. JOHN HENRY JOHNSON, of 47, Lincoln's Inn Fields, in the County of Middlesex, and of 166, Buchanan Street, in the City of Glasgow, North Britain, Gentleman, for an invention for—"Improvements in forging and rolling metals applicable to the manufacture of wheels, spades, shovels, axles, buffers, and other articles of wrought iron."—*A communication to him from abroad by Messieurs H. Petin Gaudet and Company, of Paris, in the Empire of France, Engineers.* *Letters Patent sealed.*

JACOBY.
STONES.
27th September 1860.

2348. MORITZ JACOBY, of the Town of Nottingham, Merchant, and JOSEPH STONES, of the Town of Nottingham, aforesaid, Designer and Draughtsman, for an invention for—"Improvements in the manufacture of bobbin net or twist lace in bobbin net or twist lace machines." *Letters Patent sealed.*

HODGKINSON.
27th September 1860.

2349. WILLIAM HODGKINSON, of New Lenton, in the County of Nottingham, Mechanist and Draughtsman, for an invention for—"Improvements in machinery or apparatus in the manufacture of figured laces made on bobbin net machines." *Provisional protection only.*

WINRAM.
27th September 1860.

2350. JAMES WINRAM, of Liverpool, in the County of Lancaster, Boat Builder, for an invention for—"Improvements in machinery for the manufacture of casks and other like vessels of capacity." *Letters Patent sealed.*

MARTIN.
PURDIE.
28th September 1860.

2351. WILLIAM ARENA MARTIN, and JAMES PURDIE, of Old Barge House Wharf, Upper Ground Street, in the County of Surrey, Engineers, for an invention for—"An improved method of mounting and giving motion to fire-bars." *Letters Patent sealed.*

SHEPPARD.
28th September 1860.

2352. AUGUSTUS FREDERICK SHEPPARD, of 38, Moorgate Street, in the City of London, Gentleman, for an invention for—"An improved method of and apparatus for plate printing."—*A communication to him from abroad by E. Muggeridge, of New York, United States of America.* *Letters Patent sealed.*

GILBEE.
28th September 1860.

2353. HENRY GILBEE, of No. 4, South Street, Finsbury, in the County of Middlesex, for an invention for—"An improved medicament to prevent and cure venereal diseases."—*A communication to him from abroad by Noel Pascal, of Paris, France.* *Provisional protection only.*

ASPELL.
BOOTH.
HURST.
28th September 1860.

2354. JAMES ASPELL, of Middleton, in the County of Lancaster, Manufacturer, and EDWARD BOOTH, of Tonge, near Middleton, Manager, and JAMES HURST, of the same place, Overlooker, for an invention for—"A certain improvement in power-looms for weaving." *Letters Patent sealed.*

BIRKBECK.
28th September 1860.

2355. GEORGE HENRY BIRKBECK, of the firm of Tongue and Birkbeck, of 34, Southampton Buildings, Chancery Lane, in the County of Middlesex, Patent Agents & Engineers, for an invention for—"Improvements in electro-magnetic apparatus."—*A communication to him from abroad by Gabriel Perrin, of Paris, in the Empire of France.* *Provisional protection only.*

NEWTON.
28th September 1860.

2356. ALFRED VINCENT NEWTON, of the Office for Patents, 66, Chancery Lane, in the County of Middlesex, Mechanical Draughtsman, for an invention for—"An improvement in the mode of obtaining impressions from printing plates."—*A communication to him from abroad by William Harrison Oakes, of the City of New York.* *Provisional protection NOT granted.*

CALLANDER.
28th September 1860.

2357. JOHN ALEXANDER CALLANDER, of Springfield House, near Ryde, in the Isle of Wight, for an invention for—"An improved method of hanging doors." *Letters Patent sealed.*

GREEN.
29th September 1860.

2358. CHARLES GREEN, of Winnington, near Northwich, in the County of Chester, Gentleman, for an invention for—"Improvements in the manufacture of salt." *Provisional protection only.*

GREEN.
29th September 1860.

2359. WILLIAM GREEN, of Dod Street, Victoria Road, Limehouse, in the County of Middlesex, for an invention for—"Improvements in refining or treating sugar and molasses." *Letters Patent sealed.*

ROBERTS.
29th September 1860.

2360. JOHN ROBERTS, of Upnor, in the County of Kent, Terra Cotta Manufacturer, for an invention for—"An improved mode of and apparatus for harvesting corn and other crops and ventilating granaries." *Provisional protection only.*

DELESALLE.
29th September 1860.

2361. ALPHONSE DELESALLE, of Lille, in the Departement of the "Nord," in the Empire of France, Manufacturer, for an invention for—"Means and apparatuses used in steam-engines for expelling out of the cylinders the condensed water, and to employ this water for the alimentation of boilers." *Provisional protection only.*

OFFERGELD.
29th September 1860.

2362. HENRY OFFERGELD, of Eilendorf, near Aix-la-Chapelle, Mechanician, for an invention for—"Improvements in drums and apparatus connected therewith for giving motion to shafts." *Letters Patent sealed.*

WARNER.
29th September 1860.

2363. ARTHUR WARNER, of Threadneedle Street, in the City of London, for an invention for—"Improvements in the manufacture of iron, steel, copper, lead, tin, zinc and their alloys, and in the manufacture of coke." *Letters Patent sealed.*

ROBINSON.
29th September 1860.

2364. THOMAS ROBINSON, of Saint Helen's, Lancashire, Iron Founder, for an invention for—"Improvements in machinery for packing soda ash and other matters or substances in casks and other vessels." *Letters Patent sealed.*

MUSHET.
29th September 1860.

2365. ROBERT MUSHET, of Coleford, in the County of Gloucester, Metallurgist, for an invention for—"An improvement in the manufacture of cast steel." *Letters Patent sealed.*

CLARK.
POLLOCK.
WHYTE.
1st October 1860.

2366. JOHN CLARK, Joiner, WILLIAM POLLOCK, Merchant, and JAMES WHYTE, Mechanic, all of Paisley, in the County of Renfrew, North Britain, for an invention for—"Improved apparatus for spinning or twisting." *Letters Patent sealed.*

STEANE.
1st October 1860.

2367. ELIZABETH STEANE, of Commercial Place, Brixton, in the County of Surrey, Widow, for an invention for—"Improvements in apparatus by the use of which the dropping or guttering of candles is prevented." *Provisional protection only.*

HULME.
1st October 1860.

2368. GEORGE HULME, of Rochdale, in the County of Lancaster, Machinist, for an invention for—"An Improvement or improvements in the process of carding wool, cotton, silk or other fibrous materials, and in machinery or apparatus applicable for that purpose." *Provisional protection only.*

FIELD.
1st October 1860.

2369. JAMES JOHN FIELD, of Holloway Place, Holloway, in the County of Middlesex, Analytical and Manufacturing Chemist, for an invention for—"Improvements in condensing the vapours arising from fluids evaporating in closed vessels, which invention is also applicable to the condensation of the vapours of volatile fluids during the process of distillation, and for improvements in apparatus to be employed for the purpose." *Provisional protection only.*

HURST.
HORSEY.
BAKER.
1st October 1860.

2370. CHARLES HENRY HURST, of Victoria Terrace, Royal Road, Kennington, in the County of Surrey, HENRY HORSEY, and GEORGE BAKER, both of Bridge Street, Southwark, in the County of Surrey, for an invention for—"Improvements in syphon and other taps or cocks employed for drawing off liquids." *Letters Patent sealed.*

HENRY.
1st October 1860.

2371. MICHAEL HENRY, of 84, Fleet Street, in the City of London, Patent Agent, for an invention for—"An addition to or improvement in gas meters."—*A communication to him from abroad by Guillaume Amedée Filhol Peyre, and François Barthelemy, of 33, Boulevard Saint Martin, Paris.* *Provisional protection only.*

RUTTER.
2nd October 1860.

2372. GEORGE RUTTER, of 16, Great Guildford Street, Southwark, in the County of Surrey, for an invention for—"Improvements in machinery and apparatus for and in treating flax, hemp, rheea, China grass, New Zealand flax, plantain, and all other vegetable and animal fibres." *Provisional protection only.*

HELLARD.
2nd October 1860.

2373. ROBERT HELLARD, Reaping Machine Manufacturer, of North Street, Taunton, in the County of Somerset, for an invention for—"Improvements in reaping and mowing machines." *Letters Patent sealed.*

PARKER.
2nd October 1860.

2374. JAMES PARKER, of No. 6, Lilford Road, Camberwell, Surrey, Solicitor's Managing Clerk, for an invention for—"Improvements in propelling vessels by the buoyant power of steam, hot air and vapour in combination in rising through water." *Provisional protection only.*

BULLOUGH.
WALMSLEY.
2nd October 1860.

2375. JAMES BULLOUGH, & JOHN WALMSLEY, of Baxenden, near Accrington, in the County of Lancaster, for an invention for—"Improvements in looms." *Letters Patent sealed.*

WHITTAM.
2nd October 1860.

2376. ROBERT WHITTAM, of Accrington, in the County of Lancaster, Engraver, for an invention for — "Improvements in pentagraph machines used for engraving metal rollers or cylinders employed in printing calicoes and other surfaces."
Letters Patent sealed.

MACNAMARA.
2nd October 1860.

2377. BAMFYELD HENRI FRANCIS MACNAMARA, of Great Yarmouth, in the County of Norfolk, for an invention for — "Improvements in the construction of floating breakwaters adapted for the facile and economic formation of harbors of refuge and other such purposes." *Letters Patent sealed.*

ROBINSON.
2nd October 1860.

2378. JOHN THOMAS ROBINSON, of Bradford, in the County of York, Wool Dealer, for an invention for—"Improvements in screw gill apparatus for combing wool and other fibrous materials." *Letters Patent sealed.*

ROBARTS.
2nd October 1860.

2379. WILLIAM GREAVES ROBARTS, of the Town and County of the Town of Nottingham, Warper, for an invention for — "Improvements in machinery or apparatus in the manufacture of fabrics made on warp machines."
Provisional protection only.

STEANE.
PALLING.
2nd October 1860.

2380. ELIZABETH STEANE, of Commercial Place, Brixton Road, in the County of Surrey, Widow, and FRANCIS PALLING, of Esher Street, Lambeth, in the same County, Clerk, for an invention for—"An improved means or apparatus for preventing candles dropping or guttering." *Provisional protection only.*

GARDNER.
LINDSAY.
2nd October 1860.

2381. PETER GARDNER, and ANDREW LINDSAY, of the Town and County of Stirling, North Britain, Reaping Machine Makers, for an invention for—"Improvements in knives for reaping machines." *Provisional protection only.*

RUSH.
2nd October 1860.

2382. HENRY CHATTERTON RUSH, of Spencer Road, Putney, in the County of Surrey, Gentleman, for an invention for—"Improvements in fences for railway platforms." *Provisional protection only.*

BONELLI.
2nd October 1860.

2383. GAETANO BONELLI, of Milan, in the Kingdom of Sardinia, Engineer, for an invention for—"Improved apparatus for transmitting telegraphic despatches."
Provisional protection NOT granted.

RHODES.
SYME.
2nd October 1860.

2384. GODFREY RHODES, of Albemarle Street, in the County of Middlesex, Major in Her Majesty's Army, and JAMES SYME, of Bishopsgate Street, in the City of London, Engineer, for an invention for—"Improvements in tent frames, and in rendering coverings for tent frames and other textile fabrics and fibres and surfaces waterproof." *Letters Patent sealed.*

BROKENSHIRE.
2nd October 1860.

2385. JOHN BROKENSHIRE, of Bowmanville, County of Durham, Canada West, Pump Maker, for an invention for—"Improvements in pumps."
Letters Patent sealed.

NORTON,
2nd October 1860.

2386. JAMES LEE NORTON, of No. 38, Belle Sauvage Yard, in the City of London, for an invention for—"Improvements in apparatus used in tentering or stretching and drying fabrics." *Letters Patent sealed.*

TAYLOR.
2nd October 1860.

2387. GEORGE EDWARD TAYLOR, of Oatlands Mill, Leeds, Cloth Finisher, for an invention for—"Improvements in apparatus used when boiling cloth."
Letters Patent sealed.

MATHER.
2nd October 1860.

2388. COLIN MATHER, of Salford, in the County of Lancaster, Engineer, for an invention for—"Improvements in machinery for shearing and singeing fabrics."
Letters Patent sealed.

JOHNSON.
3rd October 1860.

2389. THOMAS JOHNSON, of 9, Leicester Square, St. Anne's, Westminster, for an invention for—"An improved tobacco pipe." *Provisional protection only.*

BOWER.
BOWER.
3rd October 1860.

2390. JOSEPH BOWER, and DAVID FARRAR BOWER, both of Hunslet, in the County of York, Chemists, for an invention for—"An improvement in the manufacture of iron and cast steel." *Letters Patent sealed.*

JAMES.
3rd October 1860.

2391. ROBERT JAMES, of Faversham, in the County of Kent, for an invention for—"Improvements in reaping and mowing machines."
Provisional protection only.

WILLIAMSON.
PERKINS.
3rd October 1860.

2392. ALEXANDER WILLIAM WILLIAMSON, of University College, in the County of Middlesex, and LOFTUS PERKINS, of Francis Street, Gray's Inn Road, in the County of Middlesex, for an invention for—"Improvements in steam-engines."
Letters Patent sealed.

RIDDELL.
3rd October 1860.

2393. JOSEPH HADLEY RIDDELL, of No. 155, Cheapside, in the City of London, American Stove Merchant, for an invention for—"Improvements in boilers."
Letters Patent sealed.

HUGHES.
3rd October 1860.

2394. EDWARD THOMAS HUGHES, of the firm of Hughes and Son, Patent Agents, 123, Chancery Lane, London, W.C., for an invention for—"Improvements in healds or heddles employed in looms for weaving."—*A communication to him from abroad by Jean-Pierre Bourdelin, of Lyons, in the Empire of France.*
Provisional protection only.

COLE.
3rd October 1860.

2395. RICHARD JOHN COLE, of No. 11, Pembridge Gardens, Bayswater, in the County of Middlesex, Esquire, for an invention for—"Improvements in ornamenting the windows of public and private vehicles." *Letters Patent sealed.*

MAHON.
3rd October 1860.

2396. ARTHUR IRWIN MAHON, of Dublin, for an invention for—"Improvements in screw propellers, applicable also for raising and forcing water and other liquids and obtaining motive-power from the same." *Letters Patent sealed.*

GREAVES.
3rd October 1860.

2397. JOHN WHITEHEAD GREAVES, of Port Madoc, in the County of Carnarvon, Esquire, for an invention for—"Improvements in slate dressing machines."
Letters Patent sealed.

NEWTON.
3rd October 1860.

2398. WILLIAM EDWARD NEWTON, of the Office for Patents, 66, Chancery Lane, in the County of Middlesex, Civil Engineer, for an invention for—"Improvements in lamps for burning coal oils and other hydrocarbons containing an excess of carbon."—*A communication to him from abroad by William Henry Racey, of the City of Saint Augustine, in the State of Florida, United States of America.*
Letters Patent sealed and specification filed by order.

ROBINSON.
3rd October 1860.

2399. JOHN ROBINSON, of Rochdale, in the County of Lancaster, Timber Merchant, for an invention for—"Improvements in machinery commonly called log frames for sawing timber." *Provisional protection only.*

WHICHER.
4th October 1860.

2400. CHARLES WHICHER, Gentleman, residing at 28, Crozier Street, Lambeth, in the County of Surry, for an invention for—"An improved machine for applying steam in a manner to cause direct rotation."—*A communication to him from abroad by Messrs. Grande Olivieri and Mongiardino, of Turin, Italy.*
Provisional protection only.

COWPER.
4th October 1860.

2401. CHARLES COWPER, of 20, Southampton Buildings, Chancery Lane, in the County of Middlesex, Patent Agent, for an invention for—"Improvements in the manufacture or extraction and application of colouring matters from the products of the distillation of coal tar."—*A communication to him from abroad by Joseph Marie Albert Battalier, residing at Avignon, in France.* *Letters Patent sealed*

KNIGHT.
4th October 1860.

2402. JOHN ADAMS KNIGHT, of the "International Patent Agency," No. 4, Symonds Inn, Chancery Lane, in the County of Middlesex, for an invention for—"A new or improved mode of inflating air-mattresses and air-cushions."—*A communication to him from abroad by John Mellier, Cabinet Maker, of St. Chamond (Loire), France.* *Letters Patent sealed.*

REYNAUD.
4th October 1860.

2403. LOUIS PROSPER REYNAUD, of Paris, in the Empire of France, for an invention for—"An improved buckle." *Provisional protection only.*

SOOTHERAN.
CARR.
4th October 1860.

2404. JOHN SOOTHERAN, and JOHN CARR, both of Pickering, in the County of York, Agricultural Engineers, for an invention for—"Improvements in reaping-machines." *Letters Patent sealed.*

JONES.
4th October 1860.

2405. MICHAEL JONES, of Lidlington Place, Camden Town, in the County of Middlesex, Gentleman, for an invention for—"Improvements in rifles and other fire-arms whereby to insure greater accuracy in the use of the sights."
Provisional protection only.

FLEY.
4th October 1860.

2406. HENRY FLEY, of Cross Street, Wilderness Row, in the County of Middlesex, Lamp Manufacturer, for an invention for—"Improvements in signal lamps."
Provisional protection only.

MORRIS.
4th October 1860.

2407. JAMES MORRIS, of Clapham, in the County of Surrey, Gentleman, for an invention for—"Improvements in holdfasts and guide pulleys for the cords of venetian blinds for windows." *Letters Patent sealed.*

TUCKETT. 5th October 1860.

2408. CHARLES TUCKETT, Junior, of the British Museum, and No. 3, Bickerton Terrace, Haverstock Hill, in the County of Middlesex, Bookbinder, for an invention for—"An improved method of ornamenting book covers, which is also applicable to other purposes." *Letters Patent sealed.*

CALLEBAUT. 5th October 1860.

2409. CHARLES CALLEBAUT, Merchant, of Rue Sainte-Appoline, Paris, France, & of 4, South Street, Finsbury, London, for an invention for—"Improvements in sewing-machines." *Letters Patent sealed.*

WIMPENNY. 5th October 1860.

2410. THOMAS WIMPENNY, of Holmfirth, in the County of York, Manufacturer, for an invention for—"A certain improvement in machinery or apparatus to be employed for spinning cotton and other fibrous substances." *Provisional protection only.*

MACNAUGHT. 5th October 1860.

2411. WILLIAM MACNAUGHT, of Manchester, in the County of Lancaster, Engineer, for an invention for—"Certain improvements in steam-engines." *Letters Patent sealed.*

ANDERSON. 5th October 1860.

2412. JAMES ANDERSON, of Newton, in the County of Ayr, North Britain, for an invention for—"Improvements in preparing or arranging potatoes for sale." *Provisional protection NOT granted.*

RICHARDSON. 5th October 1860.

2413. THEODORE MANSFIELD RICHARDSON, of the State of Maine, of the United States of America, for an invention for—"A new and useful or improved steering apparatus for navigable vessels." *Complete specification; Letters Patent sealed.*

BROCCHI. 5th October 1860.

2414. AUGUSTE BROCCHI, of Rue Racine, Paris, Engineer, for an invention for—"An improved waterproof cement or composition." *Provisional protection only.*

RICKETT. 5th October 1860.

2415. THOMAS RICKETT, of the Castle Foundry, Buckingham, in the County of Buckingham, Engineer, for an invention for—"Improvements in locomotive engines for common roads." *Provisional protection only.*

CLEGG. WILD. TOMLINSON. 6th October 1860.

2416. WILLIAM CLEGG, of Rochdale, in the County of Lancaster, Carder, THOMAS WILD, of the same place, Manager, and JAMES TOMLINSON, of the same place, Machine Maker, for an invention for—"Improvements in certain machines for preparing cotton and other fibrous materials." *Letters Patent sealed.*

HANDS. 6th October 1860.

2417. RICHARD MEDWIN HANDS, of Coventry, in the County of Warwick, for an invention for—"Improvements in dressing or giving lustre to silks, ribbons and other fabrics, also to threads and yarns." *Provisional protection only.*

PARKES. 6th October 1860.

2418. WILLIAM SALTER PARKES, of West Bromwich, in the County of Stafford, Engineer, for an invention for—"A new or improved washing-machine." *Provisional protection only.*

CAULFIELD. 6th October 1860.

2419. WILLIAM BEARE CAULFIELD, of 54, Cole Harbour, Blackwall, Middlesex, Steam Tug Owner, for an invention for—"Slinging and raising sunken or stranded vessels." *Provisional protection only.*

KENNARD. 6th October 1860.

2420. WILLIAM KENNARD, of 19, Southgate Terrace, Southgate Road, New North Road, in the County of Middlesex, for an invention for—"Improvements in hanging window sashes." *Provisional protection only.*

NEWTON. 6th October 1860.

2421. WILLIAM EDWARD NEWTON, of the Office for Patents, 66, Chancery Lane, in the County of Middlesex, Civil Engineer, for an invention for—"Improvements in knitting machinery and in the mode of operating the same."—*A communication to him from abroad by the McNary Knitting Machine Company, of the City of New York.* *Letters Patent sealed.*

WESTHEAD. 6th October 1860.

2422. EDWARD WESTHEAD, of Manchester, in the County of Lancaster, Merchant, for an invention for—"Improvements in generating steam and in apparatus connected therewith." *Provisional protection only.*

PLATT. 6th October 1860.

2423. JOHN PLATT, of Oldham, in the County of Lancaster, Mechanical Engineer, for an invention for—"Improvements in machinery or apparatus for forging or shaping cranks or bars of metal." *Letters Patent sealed.*

SARJEANT. 6th October 1860.

2424. ARTHUR SARJEANT, of Peckham, of the County of Surrey, Surgeon, for an invention for—"An improvement in malt liquors." *Letters Patent sealed.*

YATES. 6th October 1860.

2425. WILLIAM YATES, of Bromley, in the County of Middlesex, Engineer, for an invention for—"Improvements in steam-boiler and other furnaces, and in apparatus connected therewith." *Letters Patent sealed.*

SAMUELSON. 8th October 1860.

2426. BERNHARD SAMUELSON, of Banbury, in the County of Oxford, Engineer, for an invention for—"Improvements in harvesting machines." *Letters Patent sealed*

PARIS. 8th October 1860.

2427. MATTHEW PARIS, of Hill Side, Wimbledon, in the County of Surrey, for an invention for—"Improvements in fire-arms." *Provisional protection only.*

HENSON. 8th October 1860.

2428. JAMES HENSON, of 13, Parliament Street, Westminster, Civil Engineer, for an invention for—"Improvements in the manufacture of chains for coupling or connecting the carriages, wagons and other vehicles on railways, applicable also to various other purposes." *Provisional protection only.*

COPE. 8th October 1860.

2429. DAVID COPE, of Liverpool, in the County of Lancaster, Oil Merchant, for an invention for—"Improvements in drums, kegs, casks and like packages, and in machinery or apparatus employed in the manufacture of the same." *Letters Patent sealed.*

WHITAKER. 8th October 1860.

2430. SAMUEL WHITAKER, of Liverpool, in the County of Lancaster, Licensed Victualler, for an invention for—"Improvements in the construction of fluid taps or cocks." *Letters Patent sealed.*

UNDERWOOD. 8th October 1860.

2431. GEORGE HILL UNDERWOOD, of the City of Manchester, in the County of Lancaster, Chymist, for an invention for—"Improvements in finishing and stiffening textile fabrics." *Provisional protection only.*

HUGHES. 8th October 1860.

2432. EDWARD JOSEPH HUGHES, of the City of Manchester, in the County of Lancaster, Patent Agent, for an invention for—"Improvements in the preparation of certain coloring matters, and also a process of printing and dyeing woven fabrics, yarns and other substances."—*A communication to him from abroad by Paul Depoully, Ernest Depoully, and Charles Lauth, of Clichy, in the Empire of France.* *Provisional protection only.*

KNIGHT. 8th October 1860.

2433. JOHN ADAMS KNIGHT, of the International Patent Agency, No. 4, Symonds Inn, Chancery Lane, in the County of Middlesex, for an invention for—"An improved lathe for ribbon-looms."—*A communication to him from abroad by Etienne Calonnier-Peyron, of St. Etienne, in the Department of the Loire, France, Manufacturer.* *Letters Patent sealed.*

BRIGHT. 8th October 1860.

2434. HENRY BRIGHT, of Sandwich Street, Burton Crescent, in the County of Middlesex, for an invention for—"An improved guard or cutwater for ships or vessels, for the purpose of lessening or preventing injurious effects resulting from collision." *Provisional protection only.*

NEWTON. 8th October 1860.

2435. WILLIAM EDWARD NEWTON, of the Office for Patents, 66, Chancery Lane, in the County of Middlesex, Civil Engineer, for an invention for—"Certain improvements in springs for railroad cars, locomotives, and carriages."—*A communication to him from abroad by John E. Jerrold, John Eugene Beggs, and Francis Scott, all of Paterson, Passaic County, State of New Jersey, in the United State of America.* *Provisional protection only.*

NEWTON. 8th October 1860.

2436. WILLIAM EDWARD NEWTON, of the Office for Patents, 66, Chancery Lane, in the County of Middlesex, Civil Engineer, for an invention for—"Improvements in the treatment of ores and coal."—*A communication to him from abroad by Charles K. Landis, of Philadelphia, State of Pennsylvania, United States of America.* *Provisional protection only.*

JOLLY. 8th October 1860.

2437. LOUIS JULIEN OLIVIER JOLLY, Advocate, at Paris, Town in the French Empire (33, B^{ard} St. Martin), for an invention for—"Improvements in the means of winding up and setting watches."—*A communication from Felix Berthet (Clockmaker), a person resident at Besançon, France.* *Letters Patent sealed.*

CALKIN. 8th October 1860.

2438. JOSEPH CALKIN, of Oakley Square, Mornington Crescent, in the County of Middlesex, for an invention for—"An improved apparatus for protecting the upper portion of the face from the inclemency of the weather, dust or otherwise." *Letters Patent sealed.*

CLARK. 8th October 1860.

2439. WILLIAM CLARK, of 53, Chancery Lane, in the County of Middlesex, Engineer and Patent Agent, for an invention for—"Improvements in cleaning or separating gutta-percha from extraneous matters and in apparatus for the same."—*A communication to him from abroad by Messrs. Louis Boulet, Auguste Sarazin, and Louis Hamy, of Calais, in the Empire of France, Merchants.* *Letters Patent sealed.*

CLARK.
8th October 1860.

2440. WILLIAM CLARK, of 53, Chancery Lane, in the County of Middlesex, Engineer and Patent Agent, for an invention for—"Improvements in driving straps and belts."—*A communication to him from abroad by Messrs. Louis Boulet, Auguste Sarazin, and Louis Hamy, of Calais, in the Empire of France, Merchants.*
Provisional protection only.

JOHNSON.
8th October 1860.

2441. JOHN HENRY JOHNSON, of 47, Lincoln's Inn Fields, in the County of Middlesex, and of 166, Buchanan Street, in the City of Glasgow, North Britain, Gentleman, for an invention for—"Improvements in railways or tramways, and in carriage wheels to be used thereon."—*A communication to him from abroad by William Wharton, Junior, of Philadelphia, in the State of Pennsylvania, United States of America.* *Letters Patent sealed.*

GARDNER.
8th October 1860.

2442. EDWARD GARDNER, of Maidstone, in the County of Kent, Engineer and Brassfounder, for an invention for—"Improvements in machinery or apparatus employed in the manufacture of paper." *Letters Patent sealed.*

HOOD.
8th October 1860.

2443. WALTER HOOD, of Glasgow, in the County of Lanark, North Britain, Clothier, for an invention for—"Improvements in ladies' trowsers, drawers, or other underclothing." *Letters Patent sealed.*

SNELL.
9th October 1860.

2444. WILLIAM SNELL, of 13, Clement's Inn, Strand, in the County of Middlesex, Agent, for an invention for—"An improved machine for making horse-shoe nails."—*A communication to him from abroad by Amos Whittemore, of Cambridgeport, in the County of Middlesex, State of Massachusetts, and United States of America.*
Complete specification; Letters Patent sealed.

EDGE.
9th October 1860.

2445. JONATHAN EDGE, of the Tipping Iron Works, Bolton-le-Moors, in the County of Lancaster, for an invention for—"Certain improvements in steam-engines." *Letters Patent sealed.*

WORTHINGTON.
MILLS.
9th October 1860.

2446. EDWARD WORTHINGTON, of the City of Manchester, in the County of Lancaster, Gentleman, and ROBERT MILLS, of Rochdale, in the said County, Engineer, for an invention for—"Improvements in apparatus for preventing the retrogression of railway carriages on inclines." *Letters Patent sealed.*

PRICE.
9th October 1860.

2447. GEORGE PRICE, of Wolverhampton, in the County of Stafford, Iron Safe and Lock Manufacturer, for an invention for—"An improvement in the manufacture or construction of metallic armour for vessels of war, land defences, shields for ordnance, mantellets, &c." *Provisional protection only.*

STEVENS.
9th October 1860.

2448. CHARLES STEVENS, Manager of the British and Foreign Office for Patents, No. 1B, Welbeck Street, Cavendish Square, in the County of Middlesex, for an invention for—"Improvements in atmospheric railways."—*A communication to him from abroad by V. Clovis Simboiselle, of 42, Rue Laffite, Paris, in the Empire of France.*
Provisional protection only.

PRICE.
9th October 1860.

2449. GEORGE PRICE, of Wolverhampton, in the County of Stafford, Iron Safe and Lock Manufacturer, for an invention for—"An improvement in metallic targets." *Provisional protection only.*

REYNOLDS.
DANCE.
9th October 1860.

2450. GEORGE WAIDE REYNOLDS, of Birmingham, in the County of Warwick, Manufacturer, and ENOCH DANCE, of Birmingham, aforesaid, Manufacturer, for an invention for—"New or improved machinery for the manufacture of baskets and wicker work." *Letters Patent sealed.*

ANDERSON.
9th October 1860.

2451. ROBERT ANDERSON, of Liverpool, in the County of Lancaster, Brassfounder, for an invention for—"Improvements in apparatus for economizing and regulating the flow and passage of fluids for flushing water closets."
Letters Patent sealed.

REID.
9th October 1860.

2452. GEORGE REID, of Liverpool, in the County of Lancaster, Ventilating Engineer, for an invention for—"Improvements in ventilating houses, buildings, ships and structures generally, and in apparatus for ascertaining the state of the atmosphere in the said houses, buildings, ships and structures."
Provisional protection only.

HANDS.
HANDS.
9th October 1860.

2453. RICHARD HANDS, and RICHARD MEDWIN HANDS, both of Coventry, in the County of Warwick, for an invention for—"Improvements in lustering, stretching and finishing silks and other yarns or threads."—*A communication to them from abroad by Simon Fontrobert, residing at Paris, in France.* *Letters Patent sealed.*

CHANDLER. 9th October 1860.

2454. JAMES CHANDLER, of Creek Road, Deptford, in the County of Kent, Engineer, for an invention for—"Improvements in glass gauges for indicating the levels of liquids contained in vessels of any kind." *Letters Patent sealed.*

STOCKLEY. 9th October 1860.

2455. JOSEPH STOCKLEY, of Newcastle-on-Tyne, in the County of Northumberland, Engineer, for an invention for—"Improvements in apparatus for grinding, smoothening and polishing plate glass." *Provisional protection only.*

TATUM. 9th October 1860.

2456. JOEL HAYWOOD TATUM, of New York, in the United States of America, but now residing at Peele's Hotel, Fleet Street, in the City of London, Artist, for an invention for—"Improvements in the manufacture of candlewick." *Provisional protection only.*

BONELLI. 9th October 1860.

2457. GAETANO BONELLI, of Milan, in the Kingdom of Sardinia, Engineer, for an invention for—"Improvements in electric conductors and apparatus for transmitting telegraphic despatches." *Letters Patent sealed.*

DANBY. 9th October 1860.

2458. FRANCIS DANBY, of Exmouth, in the County of Devon, for an invention for—"An improved anchor." *Letters Patent sealed.*

GRANGER. 9th October 1860.

2459. ARTHUR GRANGER, Stationer, 308, High Holborn, London, for an invention for—"A better and cheaper kind of embossing press for embossing or stamping paper, linen and other articles." *Provisional protection only.*

RAMSBOTTOM. 10th October 1860.

2460. JOHN RAMSBOTTOM, of Crewe, in the County of Chester, Engineer, for an invention for—"An improved mode of lubricating the pistons and valves of steam-engines and other machines actuated by steam." *Letters Patent sealed.*

BARNETT. 10th October 1860.

2461. THOMAS BARNETT, of Beverley, in the County of York, Miller, for an invention for—"Improvements in machinery for drying grain, roots and seeds, and for roasting coffee, cocoa, chicory, malt, and other vegetable substances." *Letters Patent sealed.*

WHEATSTONE. 10th October 1860.

2462. CHARLES WHEATSTONE, of Hammersmith, in the County of Middlesex, Gentleman, for an invention for—"Improvements in electro-magnetic telegraphs and apparatus for transmitting signs or indications to distant places by means of electricity, and in the means of and apparatus for establishing electric telegraphic communication between distant places." *Letters Patent sealed.*

HOBSON. HOBSON. 10th October 1860.

2463. AARON HOBSON, and JAMES HOBSON, of No. 1, Wirtemberg Street, Clapham, in the County of Surrey, for an invention for—"An atmospheric trap for the prevention of smells arising from cesspools, drains, waterclosets, urinals or any other place where smell may arise." *Provisional protection only.*

CLARK. 10th October 1860.

2464. WILLIAM CLARK, of 53, Chancery Lane, in the County of Middlesex, Engineer and Patent Agent, for an invention for—"Improved signalling and indicating apparatus."—*A communication to him from abroad by Mr. Jean Barissa, of 29, Boulevart St. Martin, Paris, in the Empire of France, Painter.* *Provisional protection only.*

FITZGERALD. 10th October 1860.

2465. DESMOND GERALD FITZGERALD, of Cambridge Street, in the County of Middlesex, Gentleman, for an invention for—"Improvements in breech-loading fire-arms." *Letters Patent sealed.*

SCOTT. 10th October 1860.

2466. JOHN SCOTT, of Sunderland, in the County of Durham, Anchor Smith, for an invention for—"An improvement in the manufacture of anchors and an improved apparatus to be employed therein." *Provisional protection only.*

MAXFIELD. 10th October 1860.

2467. ARTHUR MAXFIELD, of the Town and County of the Town of Nottingham, Sewing-Machine Manufacturer, for an invention for—"Improvements in the construction of water closets and urinals, together with flushing apparatus connected therewith, which said flushing apparatus is also applicable to the watering of gardens, the cleansing of windows, or for other purposes." *Provisional protection only.*

HORNSBY. 10th October 1860.

2468. RICHARD HORNSBY, Junior, of Spittlegate Iron Works, Grantham, Lincolnshire, for an invention for—"Improvements in machinery used for washing, wringing, mangling, and churning." *Letters Patent sealed.*

BOUSFIELD. 10th October 1860.

2469. GEORGE TOMLINSON BOUSFIELD, of Loughborough Park, Brixton, in the County of Surrey, for an invention for—"An eraser and pencil sharpener."—*A communication to him from abroad by J. J. Greenough, of 6, Wall Street, New York, United States of America.* *Letters Patent sealed.*

STIDOLPH. STIDOLPH. 10th October 1860.

2470. GEORGE FREDERICK STIDOLPH, and JOHN STIDOLPH, both of Ipswich, Organ Builders, for an invention for—"Improvements in organs." *Letters Patent sealed.*

WHITBY. DEMPSEY. 10th October 1860.

2471. TIMOTHY WHITBY, of Milbank Street, Westminster, and WILLIAM DEMPSEY, of Great George Street, Westminster, in the County of Middlesex, for an invention for—"Improvements in applying springs to railway trucks and to railway and other carriages." *Letters Patent sealed.*

STEVENS. 11th October 1860.

2472. CHARLES STEVENS, Manager of the British & Foreign Office for Patents, 1B, Welbeck Street, Cavendish Square, in the County of Middlesex, for an invention for—"An improved crinoline protector or double petticoat."—*A communication to him from abroad by Clément Duplomb, père, Jean Marie Duplomb, fils, and Louis Frédéric Levrien, of 42, Rue Laffite, Paris, in the Empire of France. Provisional protection only.*

BAKEWELL. 11th October 1860.

2473. FREDERICK COLLIER BAKEWELL, of No. 6, Haverstock Terrace, Hampstead, in the County of Middlesex, for an invention for—"Improvements in furnaces."—*A communication to him from abroad by Jacob Reese, of Pittsburgh, U. S. North America. Letters Patent sealed.*

WILLIAMS. 11th October 1860.

2474. WILLIAM MATTIEU WILLIAMS, of Handsworth, in the County of Stafford, Teacher, for an invention for—"An improvement or improvements in crayons for writing, drawing and marking." *Provisional protection only.*

SILVESTER. 11th October 1860.

2475. JOHN SILVESTER, of the firm of George Salter & Company, of West Bromwich, in the County of Stafford, Manufacturers, for an invention for—"A new or improved steam pressure and vacuum gauge." *Letters Patent sealed.*

WILSON. 11th October 1860.

2476. THOMAS WILSON, of Birmingham, in the County of Warwick, Engineer, for an invention for—"Improvements in paper files or holders." *Letters Patent sealed.*

SMITH. TAYLOR. 11th October 1860.

2477. JASPER SMITH, of Abbey Street, Bethnal Green, in the County of Middlesex, Chenille Manufacturer, and THOMAS TAYLOR, of Wellington Row, Bethnal Green, in the County of Middlesex, for an invention for—"Improvements in the manufacture of chenille and in machinery for that purpose." *Provisional protection only.*

BARKER. 11th October 1860.

2478. WILLAM BARKER, of Cornbrook, in the City of Manchester, Engineer, for an invention for—"Certain improvements in steam-engines." *Letters Patent sealed.*

HANON. 11th October 1860.

2479. ETIENNE JOSEPH HANON, of Paris, in the Empire of France, Engineer, for an invention for—"Improvements in the manufacture of vegetable albumine." *Letters Patent sealed.*

ROUSSEAU. 11th October 1860.

2480. LOUIS HENRI ROUSSEAU, of 29, Boulvart St. Martin, Paris, in the Empire of France, Mechanician, for an invention for—"Certain improvements in steam-engines." *Complete specification; Letters Patent sealed.*

COLEMAN. 11th October 1860.

2481. JOHN COLEMAN, Junior, of Woburn, in the County of Bedford, Farm Bailiff, for an invention for—"Improved apparatus for raising and stacking straw and other agricultural produce." *Letters Patent sealed.*

ROGERS. 11th October 1860.

2482. JASPER WHEELER ROGERS, of Peat House, Roberts Town, in the County of Kildare, Civil Engineer, for an invention for—"Improved means of and apparatus for collecting the excrement of towns and villages, and for facilitating the drainage of houses." *Letters Patent sealed.*

WEST. 12th October 1860.

2483. JOHN AARON WEST, of St. Helen's, in the County of Lancaster, Chemical Manufacturer, for an invention for—"Improvements in treating solutions containing sulphate of soda also metallic and other matters, and in obtaining products therefrom." *Letters Patent sealed.*

BROOMAN. 12th October 1860.

2484. RICHARD ARCHIBALD BROOMAN, of 166, Fleet Street, in the City of London, Patent Agent, for an invention for—"Improvements in machinery for cutting and packing cigars."—*A communication to him from abroad by Julius De Bary, of Offenbach, Hesse Darmstadt. Letters Patent sealed.*

NEWTON. 12th October 1860.

2485. WILLIAM EDWARD NEWTON, of the Office for Patents, 66, Chancery Lane, in the County of Middlesex, Civil Engineer, for an invention for—"Improvements in the manufacture of furniture nails or tacks, and other articles provided with metallic pins or points."—*A communication to him from abroad by Mr. Jean Felix Bapterosses, of Paris, in the Empire of France. Provisional protection only.*

NEWTON. 12th October 1860.

2486. WILLIAM EDWARD NEWTON, of the Office for Patents, 66, Chancery Lane, in the County of Middlesex, Civil Engineer, for an invention for—"An improved fastening for window shutters and blinds."—*A communication to him from abroad by Augustus Reeve, of Alloways town, Salem County, State of New Jersey, in the United States of America.* *Letters Patent sealed.*

ROGERS. 12th October 1860.

2487. JASPER WHEELER ROGERS, of Peat House, Robert's Town, in the County of Kildare, Civil Engineer, for an invention for—"Improvements in the mode of and apparatus for preparing peat for fuel." *Letters Patent sealed.*

WILSON. 12th October 1860.

2488. THOMAS WILSON, of Birmingham, in the County of Warwick, Engineer, for an invention for—"Improvements in breech loading fire-arms, ordnance, and projectiles." *Letters Patent sealed.*

RHODES. RHODES. 12th October 1860.

2489. BENJAMIN RHODES, and GEORGE RHODES, both of the Town and County of the Town of Nottingham, Mechanists, for an invention for—"Improvements in machinery and in apparatus connected therewith for the manufacture of bituminous pipes and other articles." *Provisional protection only.*

BLACKWOOD. BLACKWOOD. 13th October 1860.

2490. JOHN BLACKWOOD, and WILLIAM BLACKWOOD, of Craigton, in the County of Dumbarton, North Britain, Bleachers, for an invention for—"Improvements in apparatus for washing yarns or threads." *Letters Patent sealed.*

STRANG, otherwise HUTCHISON. 13th October 1860.

2491. MARY STRANG otherwise HUTCHISON, of Glasgow, in the County of Lanark, North Britain, Widow, Executrix, dative qua, Relict of George Hutchison, some time Merchant, of the same place, for an invention for—"Improvements in the manufacture of lubricating oil."—*The said George Hutchison was at the time of his death the first and true inventor thereof.*

Letters Patent sealed; specification filed by order.

JOHNSON. 13th October 1860.

2492. JOHN HENRY JOHNSON, of 47, Lincoln's Inn Fields, in the County of Middlesex, and of 166, Buchanan Street, in the City of Glasgow, North Britain, Gentleman, for an invention for—"Improvements in the production of colors for dyeing and printing."—*A communication to him from abroad by Louis Joseph Troost, of Paris, in the Empire of France, Chemist.* *Provisional protection only.*

WEARING. 13th October 1860.

2493. GEORGE WEARING, of the firm of George Wearing and Company, General Iron and Brassfounders, of West Bromwich, in the County of Stafford, for an invention for—"Certain improvements in the manufacture of saucepans formed of cast-iron, and which said improvements are also applicable to the manufacture of general cast-iron hollow-ware." *Letters Patent sealed.*

RESTON. 13th October 1860.

2494. SAMUEL RESTON, of Liverpool, in the County of Lancaster, Commission Agent, for an invention for—"An improved rotatory engine."

Provisional protection only.

CLARK. 13th October 1860.

2495. WILLIAM CLARK, of 53, Chancery Lane, in the County of Middlesex, Engineer and Patent Agent, for an invention for—"Improvements in lubricating apparatus."—*A communication to him from abroad by Mr. Napoléon Jourdan, of Paris, in the Empire of France, Proprietor.* *Provisional protection only.*

BROOMAN. 13th October 1860.

2496. RICHARD ARCHIBALD BROOMAN, of 166, Fleet Street, in the City of London, Patent Agent, for an invention for—"Improvements in lenses."—*A communication to him from abroad by Charles C. Harrison, of New York.*

Letters Patent sealed.

DEAVIN. 13th October 1860.

2497. MARTIN DEAVIN, of Crystal Terrace, Rotherhithe New Road, in the County of Surrey, Builder, for an invention for—"An improvement in gymnastic apparatuses known as see-saws, and an improved mode of working the same." *Letters Patent sealed.*

HARDING. 13th October 1860.

2498. HORACE WELCH HARDING, of the firm of Messrs. Thomas Harding and Sons, Accoutrement Manufacturers, No. 108, Regent Street, in the County of Middlesex, for an invention for—"An improved combined sandwich-case and drinking flask." *Provisional protection only.*

RUSSELL. BROWN. 13th October 1860.

2499. JOHN JAMES RUSSELL, and BURDETT LAMBTON BROWN, both of Wednesbury, in the County of Stafford, for an invention for—"Improvements in apparatus used for supplying steam from steam-boilers or generators."

Letters Patent sealed.

HAYWARD. 13th October 1860.

2500. THOMAS CARLYLE HAYWARD, the younger, of Highbury Park North, in the County of Middlesex, Merchant, for an invention for—"Improved ships' signals for day and night." *Provisional protection only.*

HIGGINS. WHITWORTH. 13th October 1860.

2501. JAMES HIGGINS, of Salford, in the County of Lancaster, Machine Maker, and THOMAS SCHOFIELD WHITWORTH, of the same place, Manager, for an invention for—"Improvements in machinery or apparatus for preparing, spinning and doubling cotton and other fibrous materials." *Letters Patent sealed.*

GRIMSHAW. 15th October 1860.

2502. WESTON GRIMSHAW, of Warton Lodge, Lytham, in the County of Lancaster, Gentleman, for an invention for—"Certain improvements in apparatus for superheating steam in locomotive steam-engines." *Provisional protection only.*

DAVIES. 15th October 1860.

2503. GEORGE DAVIES, of No. 1, Serle Street, Lincoln's Inn, in the County of Middlesex, and No. 28, St. Enoch Square, in the City of Glasgow, Civil Engineer and Patent Agent, for an invention for—"An improved method of and apparatus for refrigerating and freezing."—*A communication to him from abroad by Ferdinand Philippe Edouard Carré, of Paris.* *Letters Patent sealed.*

WEBSTER. 15th October 1860.

2504. JOSEPH THOMAS WEBSTER, of Mansfield, in the County of Nottingham, Gentleman, for an invention for—"An improvement in driving the spindles of doubling frames." *Letters Patent sealed.*

BRENNAND. BRENNAND. 15th October 1860.

2505. CABLE BRENNAND, and JOHN BRENNAND, of the City of Manchester, in the County of Lancaster, Calico Printers, for an invention for—"Improvements in ornamenting lappets, petticoats, window curtains, blinds and similar articles."

ROBERTS. 15th October 1860.

2506. SAMUEL ROBERTS, of Hull, in the County of York, Engineer, for an invention for—"Improvements in steam-engines." *Provisional protection only.*

STEVENS. 15th October 1860.

2507. CHARLES STEVENS, Manager of the British & Foreign Office for Patents, 18, Welbeck Street, Cavendish Square, in the County of Middlesex, for an invention for—"An improved machine for cutting out bricks and drain pipes."—*A communication to him from abroad by Louis Constant Desaint, of 42, Rue Laffite, Paris, in the Empire of France.* *Letters Patent sealed.*

GOBLE. HEMMING. 15th October 1860.

2508. GEORGE FREDERIC GOBLE, of the City of London, Metallurgist, and FREDERICK SHAND HEMMING, of the City of London, Civil Engineer, for an invention for—"Improved machinery for crushing quartz and other substances, and for mechanically and chemically extracting gold from auriferous stones or soils, and for procuring silver, copper, zinc, lead, iron and other metals from their respective ores or impregnated liquids." *Provisional protection only.*

SINGER. 15th October 1860.

2509. ISAAC MERRIT SINGER, of New York, in the United States of America, Gentleman, for an invention for—"Improvements in the construction and fitting of steam vessels." *Letters Patent sealed.*

McDOUGALL. 15th October 1860.

2510. ALEXANDER McDOUGALL, of Manchester, in the County of Lancaster, Manufacturing Chemist, for an invention for—"Improvements in materials or compositions for destroying vermin on sheep and other animals, and for protecting them therefrom." *Letters Patent sealed.*

NEWTON. 15th October 1860.

2511. WILLIAM EDWARD NEWTON, of the Office for Patents, 66, Chancery Lane, in the County of Middlesex Civil Engineer, for an invention for—"Improvements in tools or machines for the manufacture of certain kinds of metallic tubes."—*A communication to him from abroad by Felix Richard, of Paris, in the Empire of France.* *Letters Patent sealed.*

BURN. 15th October 1860.

2512. CHARLES BURN, of Delahay Street, Westminster, Civil Engineer, for an invention for—"Improvements in tramrails for street railways." *Letters Patent sealed.*

BURN. 15th October 1860.

2513. CHARLES BURN, of Delahay Street, Westminster, Civil Engineer, for an invention for—"Improvements in the permanent way of street railways." *Letters Patent sealed.*

SMITH. 15th October 1860.

2514. PETER RECTOR SMITH, of Essex Street, Strand, County of Middlesex, Gentleman, for an invention for—"Improvements in fire-arms and ordnance, and in the projectiles to be used therewith." *Letters Patent sealed.*

BENT.
LUCKOCK.
16th October 1860.

2515. JOSEPH BENT, of Newhall Street, Birmingham, in the County of Warwick, Military Ornament Manufacturer, and JOSEPH LUCKOCK, of Harborne, in the County of Stafford, articled Workman in the employ of the said Joseph Bent, for an invention for—"Certain improvements in ladies' clasps, and which said improvements are also applicable for connecting or holding waistbands, belts and other articles of dress." *Letters Patent sealed.*

BERGEN.
16th October 1860.

2516. JOHN BERGEN, of No. 63, Long Lane, West Smithfield, in the City of London, for an invention for—"Improvements in chimney pots." *Provisional protection only.*

BURNETT.
16th October 1860.

2517. CHARLES JOHN BURNETT, of Number Twenty-one, Ainslie Place, in the City of Edinburgh, North Britain, Gentleman, for an invention for—"Improvements in breech or muzzle loading ordnance." *Letters Patent sealed; no specification filed*

ROBERTS.
SYMONDS.
16th October 1860.

2518. RICHARD ROBERTS, of Adam Street, Adelphi, Consulting Engineer, and THOMAS EDWARD SYMONDS, of Adam Street, Adelphi, Captain in the Royal Navy, for an invention for—"Improvements in marine steam-engines and in machinery and apparatus connected therewith." *Provisional protection only.*

NEWTON.
16th October 1860.

2519. WILLIAM EDWARD NEWTON, of the Office for Patents, 66, Chancery Lane, in the County of Middlesex, Civil Engineer, for an invention for—"An improved mode of constructing railways."—*A communication to him from abroad by Alexander Hay, of Philadelphia, in the United States of America.* *Letters Patent sealed.*

JULLION.
16th October 1860.

2520. JOHN LOUIS JULLION, of Tynemouth, in the County of Northumberland, Chemist, for an invention for—"An improvement in the manufacture of paper." *Provisional protection only.*

JULLION.
16th October 1860.

2521. JOHN LOUIS JULLION, of Tynemouth, in the County of Northumberland, Chemist, for an invention for—"Improved machinery for making fences."—*A communication to him from abroad by Archibald Kelly, of Pittsburg, Pennsylvania, in the United States of America, a foreigner residing abroad.* *Provisional protection only.*

FRANKAU.
16th October 1860.

2522. SIDNEY FRANKAU, of Bishopsgate Street Within, London, for an invention for—"Improvements in plugs for smoking-pipes." *Provisional protection only.*

KUKLA.
17th October 1860.

2523. FRANCIS XAVIER KUKLA, of Pentonville Road, in the County of Middlesex, for an invention for—"Improvements in apparatus for heating stoves by gas." *Provisional protection only.*

RAMSELL.
17th October 1860.

2524. WILLIAM RAMSELL, Boiler Maker, of No. 218, Evelyn Street, Deptford, in the County of Kent, for an invention for—"Improvements in the manufacture of boiler plates, also applicable generally for the resistance of steam or internal pressure, and in the apparatus or machinery employed therein." *Letters Patent sealed.*

HENDERSON.
DOWN.
17th October 1860.

2525. WILLIAM HENDERSON, Chemist, of Alderley Edge, in the County of Chester, and JONATHAN DOWN, Mine Agent, of Alderley, in the County of Chester, for an invention for—"Improvements in obtaining copper, silver, tin and several other metals from their ores or any other natural or artificial compound containing one or more of these metals." *Letters Patent sealed.*

RIDSDALE.
17th October 1860.

2526. JOSEPH RIDSDALE, of the Minories, in the County of Middlesex, Engineer and Brass-founder, for an invention for—"Improvements in apparatuses for signalling, particularly applicable to marine engine room telegraphs." *Provisional protection only.*

BUDD.
17th October 1860.

2527. JAMES PALMER BUDD, of the Ystalyfera Iron Works, Swansea, for an invention for—"Improvements in the manufacture of terne plates." *Letters Patent sealed.*

CLARKE.
BUTLER.
17th October 1860.

2528. WILLIAM CLARKE, of the Town of Nottingham, Manufacturer, and SAMUEL BUTLER, of the same Town, also Manufacturer, for an invention for—"Improvements in the manufacture of fabrics in twist lace machinery." *Letters Patent sealed.*

NEWTON.
17th October 1860.

2529. WILLIAM EDWARD NEWTON, of the Office for Patents, 66, Chancery Lane, in the County of Middlesex, Civil Engineer, for an invention for—"An improved mode of preserving hops and fitting them for storage and transportation."—*A communication to him from abroad by James C. Baldwin, of Waterville, Robert Brayton, of Buffalo, both in the State of New York, one of the United States of America, and M. D. Baldwin, of Brantford, Canada.* *Provisional protection only.*

NEWTON. 17th October 1860.

2530. ALFRED VINCENT NEWTON, of the Office for Patents, 66, Chancery Lane, in the County of Middlesex, Mechanical Draughtsman, for an invention for—"Improvements in lamps."—*A communication to him from abroad by Francis Bernard De Keravenan, of the City of New York, United States of America.*

Provisional protection only.

LEYSHON. 17th October 1860.

2531. DANIEL AUGUSTUS LEYSHON, of Brockmoor, Brierley Hill, in the County of Stafford, Tinman, for an invention for—"An improvement or improvements in coating certain forms or articles of iron, steel or zinc." *Letters Patent sealed.*

DUCKHAM. 17th October 1860.

2532. HENRY ALEXANDER FREDERICK DUCKHAM, of Terthewey Lodge, Junction Road, Holloway, Gas Regulator Manufacturer, for an invention for—"Improvements in gas meters and regulators." *Letters Patent sealed.*

SEAR. 17th October 1860.

2533. WILLIAM SEAR, of Wolverton, in the County of Buckingham, Miller, for an invention for—"Improvements in cartridges." *Letters Patent sealed.*

M'CRUM. 17th October 1860.

2534. ROBERT GARMANY M'CRUM, of Milford, Armagh, Ireland, Manufacturer, for an invention for—"Improvements in machinery or apparatus for preparing 'cards' for jacquard machines." *Letters Patent sealed.*

YOUNG. 17th October 1860.

2535. GAVIN YOUNG, of Glasgow, in the County of Lanark, North Britain, Mechanic, for an invention for—"An improved hemming and binding gauge for sewing-machines." *Provisional protection only.*

EADES. WORSTENHOLM. 17th October 1860.

2536. WILLIAM EADES, General Tool Manufacturer, of Birmingham, in the County of Warwick, and GEORGE WORSTENHOLM, Machinist, also of Birmingham, aforesaid, for an invention for—"Certain improvements in screw stocks and dies for cutting or forming metal screws." *Letters Patent sealed.*

WHITE. 18th October 1860.

2537. ARCHIBALD WHITE, of Great Missenden, in the County of Buckingham, Gentleman, for an invention for—"An apparatus for drying hay, corn and roots and other things." *Letters Patent sealed.*

MARSHALL. 18th October 1860.

2538. THOMAS JOHN MARSHALL, of Bishopsgate Street Without, in the City of London, Engineer, for an invention for—"Improvements in the manufacture of paper and in machinery or apparatus for effecting the same." *Letters Patent sealed.*

JACOUT. 18th October 1860.

2539. ALFRED BERTRAND JACOUT, Director of Water-works, at Rheims, in the Empire of France, for an invention for—"Improvements in water meters." *Letters Patent sealed.*

DEBAIN. 18th October 1860.

2540. ALEXANDER DEBAIN, of Place Lafayette, 24 & 26, Paris, in the Empire of France, Manufacturer of Pianos and Harmoniums, a Knight of the Legion of Honour, for an invention for—"A new or improved sounding apparatus applicable to all musical instruments having key-boards." *Provisional protection only.*

HABEL. HOLZWASSER. BURNS. 18th October 1860.

2541. EDWARD HABEL, of Manchester, in the County of Lancaster, Mechanic, and JONAS HOLZWASSER, of the same place, Tailor, and EDWARD BURNS, of the some place, Mechanist, for an invention for—"Certain improvements in steam-engines." *Letters Patent sealed.*

WILLIAMS. 18th October 1860.

2542. HENRY WILLIAMS, of Weston-super-Mare, in the County of Somerset, Boot Manufacturer, for an invention for—"Improvements in the manufacture of boots." *Provisional protection only.*

NEWTON. 18th October 1860.

2543. ALFRED VINCENT NEWTON, of the Office for Patents, 66, Chancery Lane, in the County of Middlesex, Mechanical Draughtsman, for an invention for—"Improvements in the construction of passenger carriages."—*A communication to him from abroad by Thomas Castor, of Philadelphia, United States of America.*

Letters Patent sealed.

NEWTON. 18th October 1860.

2544. ALFRED VINCENT NEWTON, of the Office for Patents, 66, Chancery Lane, in the County of Middlesex, Mechanical Draughtsman, for an invention for—"Improved machinery for crushing quartz and other substances."—*A communication to him from abroad by Peter Hannay, of Washington, in the United States of America.*

Letters Patent sealed.

JULLION. 18th October 1860.

2545. JOHN LOUIS JULLION, of Tynemouth, in the County of Northumberland, Chemist, for an invention for—"Improvements in paper making machinery."—*A communication to him from abroad by Mr. John Hoyt, of Cleveland, Ohio, in the United States of America, a foreigner residing abroad.* *Letters Patent sealed.*

WESOLOWSKI. 18th October 1860.

2546. MAURICE WESOLOWSKI, of Cincinnati, in the State of Ohio, in the United States of America, Merchant, for an invention for—"Improvements in the obtaining of light and in the apparatus employed therein."—*The result partly of a communication from abroad made to him by Johann Nepomuck Reithoffer, of Vienna, India-Rubber Manufacturer, and partly of his own invention and discovery.*

Provisional protection only.

MACINTOSH. 18th October 1860.

2547. JOHN MACINTOSH, of North Bank, Regent's Park, in the County of Middlesex, for an invention for—"Improvements in apparatus for compressing air and in raising and forcing water and other fluids." *Letters Patent sealed.*

ANDREWS. 18th October 1860.

2548. WILLIAM ANDREWS, of Woburn Chambers, Henrietta Street, Strand, and of 58, Threadneedle Street, in the City of London, for an invention for—"Improvements in insulators for telegraph wires." *Letters Patent sealed.*

BRUCE. STEIN. 18th October 1860.

2549. GEORGE BARCLAY BRUCE, and ANDREW STEIN, both of 24, Great George Street, Westminster, for an invention for—"Improvements in rail and tram ways."

Provisional protection only.

DUKE. 18th October 1860.

2550. JAMES DUKE, of Dover, in the County of Kent, Ship Builder, for an invention for—"Improvements in the construction of life and other boats."

Provisional protection NOT granted.

MUNN. 19th October 1860.

2551. JOSEPH A. MUNN, of New York, U. S. of America, and now residing at No. 13, East Street, Red Lion Square, W.C., London, for an invention for—"A metalic thermometer."—*A communication to him from abroad by J. B. Hubbard, of the City of New York, U. S. of America.* *Provisional protection only.*

THOMPSON. FITTON. FITTON. 19th October 1860.

2552. JOHN THOMPSON, EDWARD GERRARD FITTON, and FREDERICK ALEXANDER FITTON, Foremen in the employ of Messrs. Parr, Curtis, and Madeley, Machine Makers, in the City of Manchester, for an invention for—"Improvements in machinery used in boring, turning and cutting metals and other substances, part of which is applicable for driving other machinery." *Letters Patent sealed.*

JACK. ROLLO. 19th October 1860.

2553. JAMES JACK, and DAVID ROLLO, both of Liverpool, in the County of Lancaster, Engineers, for an invention for—"Improvements in the construction of surface condensers and feed water heaters, and in the combination of certain parts of steam-engines especially adapted for marine purposes." *Letters Patent sealed.*

MARSDEN. 19th October 1860.

2554. JAMES MARSDEN, of No. 75, Turnmill Street, Clerkenwell, in the County of Middlesex, for an invention for—"An improved method of bleaching and whitening fibres and fabrics of various kinds." *Letters Patent sealed.*

HOARE. 19th October 1860.

2555. CHARLES HOARE, of Allington, in the County of Dorset, Manager to William Hounsell & Co., of Bridport, Dorset, for an invention for—"Improvements in machinery for twisting and laying flax, hemp and other fibrous materials."

Letters Patent sealed.

MOY. WARDROPER. 19th October 1860.

2556. THOMAS MOY, of No. 1, Clifford's Inn, in the City of London, Mechanical Engineer and Naval Architect, and FREDERICK BAYLY WARDROPER, of Warwick Square, Pimlico, in the County of Middlesex, a Major in Her Majesty's Indian Army, for an invention for—"Improvements in the construction of vessels for river navigation." *Provisional protection only.*

HUNTER. 19th October 1860.

2557. ANDREW GEORGE HUNTER, of 43, Dean Street, Newcastle-upon-Tyne, for an invention for—"Improvements in treating sulphurets."

Letters Patent sealed.

BURCH. 19th October 1860.

2558. JOSEPH BURCH, of Crag, near Macclesfield, in the County of Chester, Engineer, for an invention for—"Improvements in the construction of boilers for generating steam and other heating purposes." *Letters Patent sealed.*

YOUNG. 20th October 1860.

2559. WILLIAM YOUNG, of 9, Tavistock Place, Tavistock Square, London, County Middlesex, for an invention for —"Improvements in ship building."

Letters Patent sealed; no specification filed.

ASH. 20th October 1860.

2560. JAMES ASH, of Blackwall, in the County of Middlesex, Naval Architect, for an invention for—"Improvements in the construction of iron ships."

Provisional protection only.

JAMIESON. ROBINSON. ROWBOTTOM. 20th October 1860.

2561. WILLIAM JAMIESON, of Ashton-under-Lyne, in the County of Lancaster, Machinist, WILLIAM ROBINSON, of Glossop, in the County of Derby, Mill Manager, and CORDINGLEY ROWBOTTOM, also of Glossop, in the County of Derby, Carder, for an invention for—"An improvement or improvements in apparatus for grinding or sharpening the cards used in carding fibrous materials." *Letters Patent sealed.*

GRIMSHAW. 20th October 1860.

2562. WESTON GRIMSHAW, of Warton Lodge, Lytham, in the County of Lancaster, Gentleman, for an invention for—"Improvements in machinery or apparatus for drying, mixing and pulverising clay and other materials." *Letters Patent sealed.*

SMITH. SMITH. 20th October 1860.

2563. RIGBY DAVIES SMITH, and JAMES SMITH, of London Wall, in the County of Middlesex, Boot Makers, for an invention for—"Improvements in the manufacture of leggings or knickerbockers." *Provisional protection only.*

MARGETSON. 20th October 1860.

2564. PAUL MARGETSON, of New Weston Street, Bermondsey, Leather Manufacturer, for an invention for—"Improvements in boots." *Provisional protection only.*

BERTRAND. 20th October 1860.

2565. AUGUSTE CONSTANTIN AIMABLE BERTRAND, of No. 2, Cheshunt Terrace, Grange Road Bermondsey, in the County of Surrey, for an invention for—"Improvements in the manufacture of matches and cigar-lights." *Provisional protection only.*

HUGHES. 20th October 1860.

2566. EBENEZER WILLIAM HUGHES, of No. 22, Parliament Street, in the County of Middlesex, Civil Engineer, for an invention for—"Improvements in the construction of tents particularly adapted to military purposes, part of which invention is equally applicable to temporary buildings generally." *Letters Patent sealed.*

CLARK. 20th October 1860.

2567. WILLIAM CLARK, of 53, Chancery Lane, in the County of Middlesex, Engineer and Patent Agent, for an invention for—"Improvements in the manufacture of articles of jewellery and in apparatus for the same."—*A communication to him from abroad by Messrs. Jean Louis Antoine Marie Bouret, and Charles Theophile Ferré, of Paris, Engravers & Stampers.* *Letters Patent sealed.*

SMITH. HOLT. 22nd October 1860.

2568. JOHN SMITH, of the City of Manchester, Machinist, and JOHN HOLT, of Farnworth, near Bolton-le-Moors, in the County of Lancaster, Spinner, for an invention for—"Improvements in machinery for preparing and spinning cotton and other fibrous materials." *Letters Patent sealed.*

FARMER. FUGGLE. 22nd October 1860.

2569. JOHN FARMER, and JAMES LANSDELL FUGGLE, of the City of London, Stock and Cravat Manufacturers, for an invention for—"Improvements in the manufacture of scarfs, cravats and similar articles." *Provisional protection only.*

RUSSELL. 22nd October 1860.

2570. CHARLES GOURLEY RUSSELL, of Manchester, in the County of Lancaster, General Printer, for an invention for—"An improved method of and apparatus for facilitating the operation of certain kinds of printing from engraved plates, cylinders, lithographic stones, letter-press blocks and other like surfaces." *Letters Patent sealed.*

BROOMAN. 22nd October 1860.

2571. RICHARD ARCHIBALD BROOMAN, of 166, Fleet Street, in the City of London, Patent Agent, for an invention for—"Improvements in apparatuses for evaporating and concentrating, specially applicable to the manufacture of sugar."—*A communication to him from abroad by Jean Baptiste Dureau, of Arras, France.* *Letters Patent sealed.*

DIETZ. 22nd October 1860.

2572. ANDREW DIETZ, of the City and State of New York, United States, for an invention for—"A new and useful method of treating skins and hides during or after the process of tanning or finishing them, and of aiding the tanning of hides and skins." *Letters Patent sealed.*

DIETZ. 22nd October 1860.

2573. ANDREW DIETZ, of the City and State of New York, United States, for an invention for—"An improved process or method for tanning skins, hides, &c., and converting them into leather." *Letters Patent sealed.*

WADSWORTH. WADSWORTH. 22nd October 1860.

2574. JOSEPH WADSWORTH, of Marple, in the County of Chester, Mechanic, and JAMES WADSWORTH, of Salford, in the County of Lancaster, Machinist, for an invention for—"Improvements in gas burners and improved modes of manufacturing the same." *Letters Patent sealed.*

GEDGE. 22nd October 1860.

2575. WILLIAM EDWARD GEDGE, of the firm of John Gedge & Son, No. 11, Wellington Street, Strand, in the County of Middlesex, Patent Agent, for an invention for—"Improvements in feeding steam-boilers."—*A communication to him from abroad by Charles Delcourt, Engineer, Pierre Boulicault, Manufacturer, of Dijon, France, and Claude Maupoil, of Cormot, Côte d'or, France, Gentleman.* *Letters Patent sealed.*

HART.
22nd October 1860.

2576. GEORGE WILLIAM HART, of No. 9, Stanley Terrace, Southsea, in the Parish of Portsea, in the County of Hants, Engineer, for an invention for—"Improvements in the construction of vessels of war and in propellors for the same."
Letters Patent sealed.

JOHNSON.
22nd Oetober 1860.

2577. JOHN HENRY JOHNSON, of 47, Lincoln's Inn Fields, in the County of Middlesex, and of 166, Buchanan Street, in the City of Glasgow, North Britain, Gentleman, for an invention for—"Improvements in apparatus for measuring the flow of liquids, partly applicable to ordinary water cisterns."—*A communication to him from abroad by Augustin Marie Herland, of Paris, in the Empire of France.*
Letters Patent sealed.

TYLOR.
23rd October 1860.

2578. WILLIAM HENRY TYLOR, of the firm of Tylor & Sons, of Warwick Lane, Newgate Street, in the City of London, Brassfounders, for an invention for—"Improvements in apparatus for heating and aërating saline or other liquids for baths, and in the salinometers employed in connection therewith, parts of which improvements are applicable to other purposes." *Letters Patent sealed.*

CLARK.
DE LA MARE.
23rd October 1860.

2579. WILLIAM HENRY CLARK, and JOHN DE LA MARE, both of the Island of Jersey, for an invention for—"An improved lubricating composition to be used with other lubricators." *Provisional protection only.*

LEWIS.
23rd October 1860.

2580. EDWIN LEWIS, Refiner and Metal Dealer, of Birmingham, in the County of Warwick, for an invention for—"An improved apparatus for washing, cleaning or separating particles of metal from other refuse matter." *Provisional protection only.*

WILSON.
23rd October 1860.

2581. EDWARD BROWN WILSON, of Parliament Street, in the City of Westminster, Engineer, for an invention for—"Improvements in wheels for railway purposes." *Provisional protection only.*

BAYNES.
23rd October 1860.

2582. ROBERT BAYNES, of Downshire Hill, Hampstead, in the County of Middlesex, Gentleman, for an invention for—"Improvements in lawn mowing machines." *Letters Patent sealed.*

WEBBER.
23rd October 1860

2583. JOHN WEBBER, Junior, of Trentham Terrace, Grove Road, Mile End, in the County of Middlesex, for an invention for—"An improved mode of and apparatus for converting rope into oakum." *Letters Patent sealed.*

LUNGLEY.
23rd October 1860.

2584. CHARLES LUNGLEY, of Deptford, in the County of Kent, Shipbuilder, for an invention for—"Improvements in the construction of iron ships and other vessels for the purpose of rendering them unsinkable and increasing their strength."
Letters Patent sealed.

BEAZLEY.
23rd October 1860.

2585. GEORGE BEAZLEY, of 3, Highbury Park South, Islington, in the County of Middlesex, for an invention for—"A new mode of preparing dyes produced from aniline." *Provisional protection only.*

HEADLAM.
23rd October 1860.

2586. THOMAS WILLIAM HEADLAM, of No. 3, Montague Villas, Totenham, in the County of Middlesex, for an invention for—"Improvements in stuffing chairs, couches, mattresses, pillows and other such like purposes, especially adapted also for stuffing cabin furniture, and the seats and backs of public and private vehicles."
Provisional protection only.

WALENN.
24th October 1860.

2587. WILLIAM HENRY WALENN, of No. 19, Talbot Road, Camden Road, Holloway, in the Parish of Islington, in the County of Middlesex, Consulting Engineer, for an invention for—"Improvements in magneto-electric machines and in electro-magnetic engines." *Provisional protection only.*

LACAIRE.
24th October 1860.

2588. GUILLAUME LACAIRE, of Créon, in the Department of the Gironde, in the Empire of France, Public Schoolmaster, for an invention for—"An improved penholder." *Letters Patent sealed.*

KENYON.
24th October 1860.

2589. JAMES KENYON, of Adlington, in the County of Lancaster, Manager, for an invention for—"Certain improvements in looms for weaving."
Provisional protection only.

DUTTON.
24th October 1860.

2590. EDWARD KENWORTHY DUTTON, of Stretford, in the County of Lancaster, Mechanical Draughtsman, for an invention for—"Certain improvements in machinery or apparatus for singeing textile goods or fabrics." *Letters Patent sealed.*

ALLISON.
KAY.
24th October 1860.

2591. DAVID ALLISON, Pattern Maker, and JEREMIAH KAY, Joiner, of the City of Manchester, in the County of Lancaster, for an invention for—"Improvements in window frames and sashes." *Letters Patent sealed.*

TAYLOR.
GARTSIDE.
WOOD.
24th October 1860.

2592. JAMES TAYLOR, of Castle Iron Works, Stalybridge, in the County of Chester, Machine Maker, HORATIO NELSON GARTSIDE, of Horest Mill, near Delph, Saddleworth, in the County of York, Cotton Spinner, and JOHN HEAP WOOD, of the same place, Manager, for an invention for—"Improvements in self acting mules for spinning and doubling." *Provisional protection only.*

TAYLOR.
24th October 1860.

2593. WILLIAM ROWLAND TAYLOR, of Paradise House, in the City of Oxford, Gentleman, for an invention for—"Improvements in rifle belts." *Letters Patent sealed.*

M'INNES.
24th October 1860.

2594. JOHN M'INNES, of Glasgow, in the County of Lanark, North Britain, Engine Driver, for an invention for—"Improvements in machinery, apparatus or means for actuating or working railway brakes." *Letters Patent sealed.*

EDDINGTON.
24th October 1860.

2595. WILLIAM EDDINGTON, Junior, of Chelmsford, in the County of Essex, for an invention for—"Improvements in machinery for draining, ploughing, and cultivating land." *Letters Patent sealed.*

GARNETT.
24th October 1860.

2596. THOMAS GARNETT, of Low Moor, near Clitheroe, in the County of Lancaster, Cotton Spinner and Manufacturer, for an invention for—"Certain improvements in looms for weaving." *Provisional protection only.*

CHISHOLM.
CHISHOLM.
KENT.
24th October 1860.

2597. JOHN CHISHOLM, and GEORGE CHISHOLM, both of Mark Lane, in the City of London, Manufacturing Chymists, and ROBERT THOMAS KENT, of the same place, Esquire, for an invention for—"An improved method of obtaining compounds of nitrogen." *Letters Patent sealed.*

VERWEY.
25th October 1860.

2598. ANTON VERWEY, of No. 3, Croydon Grove, Croydon, in the County of Surrey, Manufacturer, for an invention for—"Improvements in the manufacture of soap." *Provisional protection only.*

BREFFIT.
25th October 1860.

2599. EDGAR BREFFIT, of 61, King William Street, in the City of London, Glass Manufacturer, for an invention for—"Improvements in the mode of packing bottles." *Letters Patent sealed.*

PROSSER.
STANDLY.
25th October 1860.

2600. WILLIAM PROSSER, of 24, Dorset Place, Dorset Square, in the County of Middlesex, and HENRY JOHN STANDLY, of 9, Pall Mall East, in the City of Westminster, in the County of Middlesex, Esquires, for an invention for—"Improvements in apparatus employed in the production of light." *Letters Patent sealed.*

RICHARDS.
25th October 1860.

2601. JOHN RICHARDS, of Tipton, in the County of Stafford, Smith, for an invention for—"A new or improved break for arresting or stopping carriages or trucks on inclines when by the breaking of coupling links or other accident the said carriages or trucks are in danger of running down the said inclines." *Provisional protection only.*

KAY.
HARTLEY.
MALLINSON.
25th October 1860.

2602. JOHN KAY, of Burnley, in the County of Lancaster, Cotton Spinner, and JOHN HARTLEY, of the same place, Manager, and THOMAS MALLINSON, of Manchester, in the same County, Machinist, for an invention for—"Certain improvements in 'self acting mules' for spinning cotton and other fibrous substances." *Letters Patent sealed.*

MANN.
25th October 1860.

2603. WILLIAM MANN, of Barnsbury, in the County of Middlesex, Gas Engineer, for an invention for—"Improvements in apparatuses for washing and condensing gas." *Letters Patent sealed.*

BROOMAN.
25th October 1860.

2604. RICHARD ARCHIBALD BROOMAN, of 166, Fleet Street, in the City of London, Patent Agent, for an invention for—"Improvements in apparatuses for raising liquids."—*A communication to him from abroad by Jacques Taillandier, of Paris, François Raynaud, of Moulins, and Jean Jan called Paulet, of Canet, all in the French Empire.* *Provisional protection only.*

COOK.
25th October 1860.

2605. HENRY COOK, of Cheetham Hill, Manchester, in the County of Lancaster, Gentleman, for an invention for—"An improvement in the manufacture of crinoline." *Letters Patent sealed.*

CAMBRIDGE.
25th October 1860.

2606. WILLIAM COLBORNE CAMBRIDGE, of Bristol, Agricultural Implement Maker, for an invention for—"Improvements in the construction of harrows." *Letters Patent sealed.*

HODSON.
25th October 1860.

2607. WILLIAM HODSON, of No. 3, Kingston Square, in the Borough of Kingston-upon-Hull, Mechanical Engineer, for an invention for—"Improvements in fire baskets or moveable grates and ovens." *Letters Patent sealed.*

BARFF. 26th October 1860.

2608. FREDERICK SETTLE BARFF, of the City and County of Dublin, for an invention for—"Improvements in the production of artificial stone, which improvements are also applicable to the preservation of stone, bricks, tiles and other analogous substances or materials." *Letters Patent sealed.*

BARFF. 26th October 1860.

2609. FREDERICK SETTLE BARFF, of the City and County of Dublin, for an invention for—"An improved self acting apparatus for extinguishing candles in lamps or otherwise." *Letters Patent sealed.*

SHARPE. 26th October 1860.

2610. WILLIAM SHARPE, of Swadlincote, in the County of Derby, Earthenware Manufacturer, for an invention for—"Improvements in latches and locks." *Letters Patent sealed.*

BOYS. 26th October 1860.

2611. HORACE BOYS, of the Downs, Northfleet, in the County of Kent, for an invention for—"Improvements in preparing the bine and leaves of the hop plant." *Provisional protection only.*

COBLEY. 26th October 1860.

2612. THOMAS COBLEY, of Meerholz, in the Electorate of Hesse, Germany, Mine Owner, for an invention for—"Improvements in the manufacture of white lead (meaning carbonates of lead)." *Letters Patent sealed.*

AUMONIER. WELLARD. 26th October 1860.

2613. HENRY STACY AUMONIER, and CHARLES JOHN WELLARD, of Saint John Street, Clerkenwell, in the County of Middlesex, Engineers, for an invention for—"Improvements in facilitating the division of sheets or pieces of paper or other substances into required forms, and in the means or apparatus employed for the purpose." *Provisional protection only.*

TIERNAN. 26th October 1860.

2614. ROBERT TIERNAN, of Liverpool, in the County of Lancaster, Pharmaceutical Chemist, for an invention for—"Improvements applicable to infants' and invalids' feeding bottles and other purposes." *Provisional protection only.*

CLARK. 26th October 1860.

2615. CHARLES FREDERICK CLARK, of Wolverhampton, in the County of Stafford, Ironfounder, for an invention for—"An improvement or improvements in enamelling or coating with glass certain kinds of metallic articles." *Provisional protection only.*

BROOMAN. 26th October 1860.

2616. RICHARD ARCHIBALD BROOMAN, of 166, Fleet Street, in the City of London, Patent Agent, for an invention for—"Improvements in uniting water, gas and other pipes and tubes."—*A communication to him from abroad by Athalis Delaporte, of Paris.* *Provisional protection only.*

PALMER. 26th October 1860.

2617. WILLIAM PALMER, of Grange Mills, Grange Road, Bermondsey, in the County of Surrey, for an invention for—"Improvements in packing the pistons of cylinders." *Letters Patent sealed.*

SYRETT. 26th October 1860.

2618. WILLIAM SYRETT, of Bury St. Edmunds, in the County of Suffolk, Engineer, for an invention for—"Improvements in steam-engines." *Letters Patent sealed.*

PRENTISS. 26th October 1860.

2619. ELIJAH FREEMAN PRENTISS, of Philadelphia, in the State of Pennsylvania, one of the United States of America, but now residing at Liverpool, in the County of Lancaster, Manufacturing Chemist, for an invention for—"Improvements in cars or carriages to run on street railways or tramways." *Letters Patent sealed.*

HATHAWAY. 27th October 1860.

2620. CHARLES HATHAWAY, of Philadelphia, in the State of Pennsylvania, one of the United States of America, but now of Liverpool, in the County of Lancaster, Engineer and Contractor, for an invention for—"Improvements in the construction of street railways and in the wheels to run thereon." *Letters Patent sealed.*

SPARKHALL. 27th October 1860.

2621. EDWARD SPARKHALL, of Cheapside, in the City of London, for an invention for—"An improvement in umbrellas and parasols." *Letters Patent sealed.*

LAWSON. 27th October 1860.

2622. HENRY LAWSON, of Holcomb Brook, near Bury, in the County of Lancaster, Mechanic, for an invention for—"Improvements in machinery for putting cop tubes on to the spindles of mules for spinning, and in apparatus for supplying the cop tubes to the said machinery." *Letters Patent sealed.*

BURCH. BOOTH. 27th October 1860.

2623. JOSEPH BURCH, of Crag, near Macclesfield, in the County of Chester, Engineer, and EDWARD BOOTH, of the City of Manchester, in the County of Lancaster, Manufacturer, for an invention for—"Certain improvements in extracting coloring matter from vegetable, animal and other substances, and making decoctions and infusions therefrom." *Letters Patent sealed.*

BOOTH.
BOOTH.
27th October 1860.

2624. EDWARD BOOTH, and MAJOR BOOTH, of the firm of "Booth and Corns," of the City of Manchester, in the County of Lancaster, Calenderers and Finishers, for an invention for—"Improvements in machinery or apparatus for finishing cotton, linen, silk and other fabrics and materials." *Letters Patent sealed.*

MABON.
GAULTON.
27th October 1860.

2625. WALTER MABON, Junior, and WILLIAM PEEL GAULTON, both of "Ashton Old Road Iron Works," in the City of Manchester, and County of Lancaster, Engineers, for an invention for—"Improvements in apparatus for heating the feed water for steam-boilers by the exhaust steam from high pressure engines." *Letters Patent sealed.*

SMEDLEY.
27th October 1860.

2626. THOMAS SMEDLEY, of Holywell, in the County of Flint, Agent, for an invention for—"Improvements in the manufacture of metal rollers and cylinders used for calico printing and other purposes." *Letters Patent sealed.*

HARRIS.
27th October 1860.

2627. JOSIAH HARRIS, of Ess Hill House, Newton Abbot, in the County of Devon, Gentleman, for an invention for—"Moveable armour for protecting ships of war and batteries from the effects of shot and shell." *Letters Patent sealed.*

HUNT.
27th October 1860.

2628. WILLIAM HUNT, of Tipton, in the County of Stafford, Mannfacturing Chemist, for an invention for—"Improvements in obtaining sulphur or certain sulphur compounds from certain other sulphur compounds, and in obtaining carbonic acid." *Provisional protection only.*

MANN.
27th October 1860.

2629. WILLIAM MANN, of the City Gas Works, Whitefriars, in the City of London, Gas Engineer, for an invention for—"A method of indicating at a distance the revolutions of shafts, spindles and axles." *Provisional protection only.*

DWYER.
27th October 1860.

2630. EDMUND KEOGH DWYER, of Pimlico, in the County of Middlesex, Gentleman, for an invention for—"Improvements in machinery for doubling, creasing and folding cloth." *Letters Patent sealed.*

ELLIOTT.
27th October 1860.

2631. FREDERICK HENRY ELLIOTT, of the Strand, in the County of Middlesex, Mathematical Instrument Maker, for an invention for—"An improved case for aneroid barometers for marine purposes." *Letters Patent sealed.*

ASHBY.
27th October 1860.

2632. JOHN ASHBY, of Croydon, in the County of Surrey, Miller, for an invention for—"Improvements in apparatus for cleaning grain before grinding and in dressing the same after being ground." *Letters Patent sealed.*

CLARK.
27th October 1860.

2633. WILLIAM CLARK, of 53, Chancery Lane, in the County of Middlesex, Engineer and Patent Agent, for an invention for—"Improvements in corsets and their fastenings, which are also applicable to other articles of dress."—*A communication to him from abroad by Alphonse Cousin, & Adèle Duval, of 29, Boulevart St. Martin, Paris,* *Letters Patent sealed.*

NEWTON.
27th October 1860.

2634. WILLIAM EDWARD NEWTON, of the Office for Patents, 66, Chancery Lane, in the County of Middlesex, Civil Engineer, for an invention for—"Improved apparatus for milking cows."—*A communication to him from abroad by L. O. Colvin, of Cincinnatus, in the County of Cortlandt, State of New York, and United States of America.* *Letters Patent sealed.*

RENTON.
29th October 1860.

2635. AMHERST HAWKER RENTON, of 49, Cambridge Street, Eccleston Square, Pimlico, in the County of Middlesex, Civil Engineer, for an invention for—"Improvements in apparatus employed in the production of light." *Provisional protection only.*

BLACKLIDGE.
29th October 1860.

2636. ROBERT BLACKLIDGE, of Bolton-le-Moors, in the County of Lancaster, Calico Printer, for an invention for—"Improvements in the preparation of materials for sizeing, dressing or finishing warps, yarns, textile fabrics, or paper." *Provisional protection only.*

BROUGH.
KILBY.
29th October 1860.

2637. NEHEMIAH BROUGH, of Birmingham, in the County of Warwick, Tool Maker, and GEORGE THOMAS KILBY, of Birmingham, aforesaid, Manufacturer, for an invention for—"New or improved fastenings for articles of dress and for fastening belts and bands generally." *Letters Patent sealed.*

WILSON.
29th October 1860.

2638. THOMAS WILSON, of Birmingham, in the County of Warwick, Engineer, for an invention for—"Improvements in moveable spanners or screw wrenches." *Letters Patent sealed.*

KNIGHT. 29th October 1860.

2639. JOHN ADAMS KNIGHT, of the International Patent Agency, No. 4, Symond's Inn, Chancery Lane, in the County of Middlesex, for an invention for—"A new system of photographic or daguerrean apparatus or objective, to be called Korn's polyograph."—*A communication to him from abroad by Charles Felix Korn, of 35, Boulevart Bonne Nouvelle, Paris, in the Empire of France.*

Provisional protection only.

NEAL. 29th October 1860.

2640. THOMAS NEAL, of Saint John Street, Smithfield, in the County of Middlesex, Engineer and Machinist, for an invention for—"Improvements in grinding mills." *Letters Patent sealed.*

ELLIOTT. ELLIOTT. 29th October 1860.

2641. FREDERICK HENRY ELLIOTT, and CHARLES ALFRED ELLIOTT, of the Strand, in the County of Middlesex, Opticians, for an invention for—"An instrument for indicating the approach of vessels to shoals, rocks and land."

Provisional protection only.

HARRISON. BRADBURY. BUCKLEY. GARSIDE. 29th October 1860.

2642. EDWARD HARRISON, of Oldham, in the County of Lancaster, Schoolmaster, WILLIAM BRADBURY, of the same place, Mechanic, JAMES BUCKLEY, of the same place, Weaver, and DAN GARSIDE, of the same place, Engineer, for an invention for—"A certain compound or certain compounds to be used as a substitute for gunpowder." *Letters Patent sealed.*

GREENWOOD. DOCKRAY. 29th October 1860.

2643. THOMAS GREENWOOD, and JACOB DOCKRAY, both of Leeds, in the County of York, Machine Makers, for an invention for—"Improvements in machinery for carding, opening and straightening tow and other fibrous substances."

Letters Patent sealed.

NEWTON. 29th October 1860.

2644. ALFRED VINCENT NEWTON, of the Office for Patents, 66, Chancery Lane, in the County of Middlesex, Mechanical Draughtsman, for an invention for—"An improved washing machine."—*A communication to him from abroad by George Morton Ramsay, of New York, in the United States of America. Provisional protection only.*

NEWTON. 29th October 1860.

2645. WILLIAM EDWARD NEWTON, of the Office for Patents, 66, Chancery Lane, in the County of Middlesex, Civil Engineer, for an invention for—"Improvements in looms."—*A communication to him from abroad by George Martin Gibson, and Thomas Alexander Johnston, both of Boston, in the County of Suffolk, and State of Massachusetts, United States of America. Letters Patent sealed.*

STOCKER. 29th October 1860.

2646. ALEXANDER SOUTHWOOD STOCKER, of Wolverhampton, in the County of Stafford, Manufacturer, for an invention for—"Improvements in the manufacture of horse and other shoes and in the machinery or apparatus to be employed therein, part of which improvements are also applicable to metal boot heels and various other articles." *Letters Patent sealed.*

CROCKFORD. 29th October 1860.

2647. CHARLES CROCKFORD, of the Greenfield Spelter Works, Holywell, Flintshire, for an invention for—"Improvements in the manufacture of spelter from the sulphuret of zinc." *Letters Patent sealed.*

CLARK. 29th October 1860.

2648. WILLIAM CLARK, of 53, Chancery Lane, in the County of Middlesex, Engineer and Patent Agent, for an invention for—"Improvements in railway brake apparatus."—*A communication to him from abroad by Mr. Antoine Grivel, Junior, of 29, Boulevart St. Martin, Paris, Engineer. Letters Patent sealed.*

HENRY. 29th October 1860.

2649. MICHAEL HENRY, of 84, Fleet Street, in the City of London, Patent Agent, for an invention for—"An improved method of manufacturing railway wheel tyres and other articles of steel."—*A communication to him from abroad by Pierre Sabatier, and Nicolas Theophile Deyeux, of 33, Boulevard Saint Martin, Paris.*

Letters Patent sealed.

DREYFUS. 30th October 1860.

2650. ISAAC DREYFUS, of Paris, in the French Empire, Manufacturer, for an invention for—"Improvements in rolling iron and in machinery employed therein."

Letters Patent sealed.

VOSE. 30th October 1860.

2651. WILLIAM TILESTON VOSE, of the State of Massachusetts, of the United States of America, for an invention for—"An improved pump or portable fire annihilator." *Complete specification; Letters Patent sealed.*

BECK. 30th October 1860.

2652. JOHN BECK, of No. 10, Issabella Street, Broad Wall, in the Parish of Christ Church, in the County of Surrey, Sanitary Engineer, for an invention for—"Improvements in stop valves for water, steam or other fluids."

Letters Patent sealed.

MILLER.
30th October 1860.

2653. DAVID SELKIRK MILLER, sometime Power Loom Weaver, presently residing at Fifty-one, Marlborough Street, Calton, Glasgow, in the County of Lanark, for an invention for—"Improvements in weaving and in the apparatus used for that purpose." *Provisional protection only.*

NEWTON.
30th October 1860.

2654. WILLIAM EDWARD NEWTON, of the Office for Patents, 66, Chancery Lane, in the County of Middlesex, Civil Engineer, for an invention for—"Improvements in the production of alumina and salts of alumina."—*A communication to him from abroad by Mr. Louis Le Chatelier, of Paris, in the Empire of France, Engineer.* *Letters Patent sealed.*

NEWTON.
30th October 1860.

2655. ALFRED VINCENT NEWTON, of the Office for Patents, 66, Chancery Lane, in the County of Middlesex, Mechanical Draughtsman, for an invention for—"An improved mode of and apparatus for desiccating wet or moist substances."—*A communication to him from abroad by J. Eugène Tourné, of New Orleans, in the Parish of Orleans, and State of Louisiana, United States of America.* *Letters Patent sealed.*

JOHNSON.
30th October 1860.

2656. JOHN HENRY JOHNSON, of 47, Lincoln's Inn Fields, in the County of Middlesex, and of 166, Buchanan Street, in the City of Glasgow, North Britain, Gentleman, for an invention for—"Improvements in rotatory engines."—*A communication to him from abroad by Edward Scheutz, of Stockholm, in the Kingdom of Sweden, Civil Engineer.* *Letters Patent sealed.*

HENDERSON.
30th October 1860.

2657. JAMES M^{c}LINTOCK HENDERSON, of Renfrew, in the County of Renfrew, Shipbuilder, for an invention for—"Improvements in marine steam-engines." *Letters Patent sealed.*

TRIBE.
30th October 1860.

2658. THOMAS TRIBE, of Princess Square, Kennington, in the County of Surrey, Master Mariner, for an invention for—"Improvements in ships' berths, bedsteads, and sofas." *Provisional protection only.*

CHÉRADAME.
LAMBERT.
31st October 1860.

2659. ANTOINE LÉOPOLD CHÉRADAME, Picture Appraiser, and JEAN BAPTISTE ACHILLE LAMBERT, of 2, Rue S^{te} Appoline, Paris, France, and of 4, South Street, Finsbury, London, for an invention for—"A life-preserver." *Letters Patent sealed.*

BULL.
31st October 1860.

2660. WILLIAM BULL, of Great George Street, Westminster, for an invention for—"Improvements in the permanent way of railways and in connection therewith." *Letters Patent sealed.*

GHISLIN.
31st October 1860.

2661. THOMAS GOULSTON GHISLIN, of 24, Southampton Row, Russell Square, in the Parish of St. George the Martyr, London, and also of St. Africa, for an invention for—"Preparing, applying and adapting certain articles of vegetable production called ciklonia-buccinalis, proteaceæ, juncus serratus, juncus trista, and amaryllideæ, to further new purposes of manufacture." *Provisional protection only.*

MARTIN.
PENFOLD.
31st October 1860.

2662. LOUIS MARTIN, of No. 6, Tenison Street, York Road, Lambeth, in the County of Surrey, and OLIVER PENFOLD, of No. 4, Blackmoor Street, Drury Lane, in the County of Middlesex, for an invention for—"Improvements in the manufacture of candles." *Letters Patent sealed.*

PEARCE.
31st October 1860.

2663. JOHN CHARLES PEARCE, of the Bowling Iron Works, near Bradford, in the County of York, Engineer, for an invention for—"Improvements in steam-engines and boilers." *Provisional protection only.*

DAVIES.
31st October 1860.

2664. GEORGE DAVIES, of No. 1, Serle Street, Lincoln's Inn, in the County of Middlesex, and No. 28, St. Enoch Square, in the City of Glasgow, Civil Engineer and Patent Agent, for an invention for—"Improvements in boxes for railway carriage axles and other shafts."—*A communication to him from abroad by Isaac P. Wendell, of Philadelphia, Pennsylvania, in the United States of America.* *Letters Patent sealed.*

DAVIES.
31st October 1860.

2665. GEORGE DAVIES, of No. 1, Serle Street, Lincoln's Inn, in the County of Middlesex, and No. 28, St. Enoch Square, in the City of Glasgow, Civil Engineer and Patent Agent, for an invention for—"Improvements in the manufacture of boots, shoes and other coverings for the feet, and in apparatus connected with such manufacture."—*A communication to him from abroad by Alexandre Joseph Duchatel, of Paris, France.* *Letters Patent sealed.*

ANDERSON.
31st October 1860.

2666. JAMES ANDERSON, of Belfast, in Ireland, and of 23, Billiter Street, in the City of London, Felt Manufacturer, for an invention for—"Improvements in the manufacture of felt and in the mode of applying the same to railways and to other uses." *Letters Patent sealed.*

REYNOLDS. SAMSON. 1st November 1860.

2667. WILLIAM REYNOLDS, of Prior Cottage, and GEORGE ALFRED SAMSON, of Duck Lane, both in Edmonton, in the County of Middlesex, for an invention for —"Improvements in the manufacture of boots and shoes." *Provisional protection only.*

JOY. 1st November 1860.

2668. DAVID JOY, of the City of Manchester, in the County of Lancaster, Engineer, for an invention for—"Improvements in the valves of steam hammers, which are also applicable to other purposes." *Letters Patent sealed.*

JOHNSON. 1st November 1860.

2669. FREDERICK JOHNSON, of 12, North Street, Westminster, Civil Engineer, for an invention for—"Improvements in fixing screw piles and moorings." *Letters Patent sealed.*

DAHMEN. 1st November 1860.

2670. MATHIAS ANTHONY JOSEPH DAHMEN, of Peckham, Engineer, for an invention for—"Protecting ships and other vessels, buildings, works of construction, and other bodies." *Provisional protection only.*

PRENTISS. 1st November 1860.

2671. E. FREEMAN PRENTISS, of the City of Philadelphia, in the United States of America, Manufacturing Chemist, for an invention for—"Improvements in the combination of chemical materials for scouring bleeching, and dying wool, cotton, silk and other materials." *Letters Patent sealed.*

UNDERHILL. 1st November 1860.

2672. JAMES UNDERHILL, of Loveday Street, Birmingham, in the County of Warwick, for an invention for—"Improvements in window sash and casement fasteners." *Letters Patent sealed.*

EDWARDS. 1st November 1860.

2673. WILLIAM EDWARDS, of the City of Manchester, Engineer, for an invention for—"A self-acting apparatus for regulating and adjusting the pressure of gas and other fluids." *Letters Patent sealed.*

NEWTON. 1st November 1860.

2674. WILLIAM EDWARD NEWTON, of the Office for Patents, 66, Chancery Lane, in the County of Middlesex, Civil Engineer, for an invention for—"An improved mode of preparing or insulating electric conductors for telegraphic purposes either on land or under water."—*A communication to him from abroad by Messieurs Claes Van den Nest & Co., of Menin, in the Kingdom of Belgium.* *Letters Patent sealed.*

BRYANT. 1st November 1860.

2675. WILBERFORCE BRYANT, of 5, Lipson Terrace, Plymouth, for an invention for—"Improvements in treating oily and fatty substances." *Provisional protection only.*

HARRATT. 1st November 1860.

2676. CHARLES HARRATT, of Hornsey Lane, Highgate, in the County of Middlesex, for an invention for—"Improvements in machinery used in giving motion to a shaft or axis used in propelling vessels, ploughs and machinery." *Letters Patent sealed.*

BETTYES. 1st November 1860.

2677. JOHN BETTYES, of 15, Upper Gloucester Street, in the County of Middlesex, Coach Builder, for an invention for—"Improvements in carriages and carriage springs." *Letters Patent sealed.*

MURRAY. 1st November 1860.

2678. ROBERT MURRAY, of 29, Sandhill, Newcastle-upon-Tyne, Commission Agent, for an invention for—"Improvements in the manufacture of telegraph cables or ropes." *Provisional protection only.*

CHAUMONNOT-DELAROTHIÈRE. 2nd November 1860.

2679. JULES CHAUMONNOT-DELAROTHIÈRE, of 2, Rue Ste. Appoline, Paris, France, and of 4, South Street, Finsbury, London, England, a Mechanician, for an invention for—"Some improvements in stocking-frames." *Provisional protection only.*

DAVIDSON. ELLERCAMP. 2nd November 1860.

2680. HENRY DAVIDSON, of Spray's Buildings, Woolwich, in the County of Kent, and JAMES McDONALD ELLERCAMP, of Powis Street, Woolwich, in the County of Kent, for an invention for—"Improved apparatus for lowering and disengaging ships' boats from their tackles, parts of said apparatus being applicable to the lowering and disengaging of other heavy bodies or merchandize." *Provisional protection only.*

WILLIAMSON. 2nd November 1860.

2681. HENRY WILLIAMSON, the younger, of Coventry, in the County of Warwick, Engine Turner, for an invention for—"Improvements in silver watch cases." *Letters Patent sealed.*

CLARK. 2nd November 1860.

2682. WILLIAM CLARK, of 53, Chancery Lane, in the County of Middlesex, Engineer and Patent Agent, for an invention for—"Improvements in steam generators."—*A communication to him from abroad by Mr. Pierre François Joly, Engineer, of 29, Boulevart St. Martin, Paris, in the Empire of France.* *Letters Patent sealed.*

TAYLOR.
2nd November 1860.

2683. JOSEPH JEPSON ODDY TAYLOR, of No. 12, Mark Lane, in the City of London, Naval Engineer, for an invention for—"An improvement in the separation of silex and silicious and other matters from steel." *Provisional protection only.*

LEONARD.
LORENTZ.
2nd November 1860.

2684. JAMES LEONARD, and BERNHARD LORENTZ, of Skinner's Place, Size Lane, in the City of London, for an invention for—"Improvements in the manufacture of ornamented woven fabrics when chenille is employed." *Letters Patent sealed.*

HAMILTON.
2nd November 1860.

2685. GEORGE HAMILTON, of 3, Royal Exchange, in the City of London, for an invention for—"Improvements in locks." *Letters Patent sealed.*

CLARK.
CLARK.
2nd November 1860.

2686. MALCOLM CLARK, and ARCHIBALD CLARK, of Glasgow, in the County of Lanark, North Britain, Biscuit Manufacturers, for an invention for—"Improvements in packages or holders for containing biscuits." *Provisional protection only.*

BROOMAN.
2nd November 1860.

2687. RICHARD ARCHIBALD BROOMAN, of 166, Fleet Street, in the City of London, Patent Agent, for an invention for—"Improvements in machinery for felting threads and other filamentous substances."—*A communication to him from abroad by Ferdinand Raphael Tavernier, of Paris.* *Letters Patent sealed.*

DENHAM.
2nd November 1860.

2688. WILLIAM THOMAS DENHAM, of 18, Wilmington Square, Clerkenwell, in the County of Middlesex, Manufacturer, for an invention for—"Improvements in producing devices on velvet paper and other fabrics or materials." *Letters Patent sealed.*

NEWTON.
2nd November 1860.

2689. WILLIAM EDWARD NEWTON, of the Office for Patents, 66, Chancery Lane, in the County of Middlesex, Civil Engineer, for an invention for—"An improvement in preparing compounds of india-rubber, gutta-percha and allied gums."—*A communication to him from abroad by Rudolph Franz Heinrich Havemann, of New Brunswick, in the State of New Jersey, and United States of America.* *Letters Patent sealed.*

NEWTON.
2nd November 1860.

2690. WILLIAM EDWARD NEWTON, of the Office for Patents, 66, Chancery Lane, in the County of Middlesex, Civil Engineer, for an invention for—"An improved press for compressing substances for packing in the form of bales or for other purposes."—*A communication to him from abroad by John Jordan Eckel, of New York, in the United States of America.* *Letters Patent sealed.*

VAN HINSBERGH.
3rd November 1860.

2691. JEAN HUBERT MARIE VAN HINSBERGH, of Breda, Holland, Manufacturer of Horse Hair, &c. &c., for an invention for—"Cleaning and preparing pork's wool so as to give it the elasticity of horse hair and the flexibility of wool for bedding, sofas, chairs, etc. etc." *Provisional protection only.*

ROBERTS.
3rd November 1860.

2692. GEORGE ROBERTS, of Openshaw, near the City of Manchester, Engineer, for an invention for—"Improvements in the construction of steam-boilers and in the flues connected therewith." *Provisional protection only.*

DURHAM.
3rd November 1860.

2693. WILLIAM DURHAM, of Loanhead, in the County of Mid Lothian, North Britain, Paper Maker, for an invention for—"Improvements in preparing materials for the manfacture of paper." *Letters Patent sealed.*

ARMOUR.
3rd November 1860.

2694. JOHN ARMOUR, of Perceton Fire Clay Works, Kilmarnock, North Britain, Manager, for an invention for—"Improvements in dies employed in the manufacture of sewerage pipes, chimney linings, and other hollow bodies of clay." *Letters Patent sealed.*

WEBB.
TIMMINS.
BROUGH.
3rd November 1860.

2695. SAMUEL WEBB, of Birmingham, in the County of Warwick, Manufacturer, and THOMAS TIMMINS, of Birmingham, aforesaid, Manufacturer, and ROBERT BROUGH, of Birmingham, aforesaid, Engineer, for an invention for—"New or improved machinery for the manufacture of nails, spikes, and staples." *Provisional protection only.*

WHITE.
PARLBY.
3rd November 1860.

2696. WILLIAM WHITE, and JOSIAH PARLBY, of Great Marylebone Street, in the County of Middlesex, Architectural Decorators, for an invention for—"Improvements in colouring or obtaining the effect of colouring and other ornamentations to surfaces in relief or partly in relief." *Provisional protection only.*

SHILLIBEER.
GILES.
3rd November 1860.

2697. GEORGE SHILLIBEER, of the City Road, in the County of Middlesex, Coach Maker, and GEORGE GILES, of Fenchurch Buildings, in the City of London, Gentleman, for an invention for—"Improvements in the construction of omnibuses or other vehicles." *Letters Patent sealed.*

PILLINER.
3rd November 1860.

2698. RICHARD BURGESS PILLINER, of 4, Hatfield Street, Stamford Street, Blackfriars Road, Southwark, London, for an invention for—" Improvements in machinery for compressing black lead or other suitable substances, part of which improvements are also applicable to packing various other materials."
Letters Patent sealed.

WRIGLEY.
3rd November 1860.

2699. THOMAS WRIGLEY, of Bridge Hall Mills, near Bury, in the County of Lancaster, Paper Manufacturer, for an invention for—" Improvements in apparatus for filtering water and other liquids." *Letters Patent sealed.*

HINTON.
3rd November 1860.

2700. GEORGE HINTON, of Oldbury, in the County of Worcester, Furnace Man, for an invention for—" Improvements in the manufacture of iron, steel-iron and steel from certain waste products, and in the machinery or apparatus to be employed in such manufacture, which improvements are also applicable to the re-melting of large lumps of iron or steel." *Letters Patent sealed.*

EDWARDS.
3rd November 1860.

2701. WILLIAM EDWARDS, of Birmingham, in the County of Warwick, Commission Agent, for an invention for—" Improvements in fire-screens or guards."
Letters Patent sealed.

SPENCE.
3rd November 1860.

2702. PETER SPENCE, of Newton Heath, near Manchester, in the County of Lancaster, Manufacturing Chemist, for an invention for—" Improvements in separating copper from its ores." *Letters Patent sealed.*

MITCHELL.
3rd November 1860.

2703. JOSEPH MITCHELL, of Keighley, in the County of York, Iron Moulder, for an invention for—" Improvements in the manufacture of cast iron pipes, tubes, rollers and similar work." *Letters Patent sealed.*

FAIRBAIRN.
NEWTON.
5th November 1860.

2704. Sir PETER FAIRBAIRN, Knight, and ROBERT NEWTON, Engineer, both of Leeds, in the County of York, for an invention for—" Improved machinery for heckling flax and hemp." *Letters Patent sealed.*

LANGSHAW.
5th November 1860.

2705. WILLIAM LANGSHAW, of Egerton, near Bolton, in the County of Lancaster, for an invention for—" Improvements in the means or method of polishing or finishing yarns or threads." *Provisional protection only.*

DAVIES.
5th November 1860.

2706. GEORGE DAVIES, of No. 1, Serle Street, Lincoln's Inn, in the County of Middlesex, and No. 28, St. Enoch Square, in the City of Glasgow, Civil Engineer and Patent Agent, for an invention for—" Improvements in travelling bags."—*A communication to him from abroad by Messieurs Keller & Co., of Paris, Manufacturers.*
Provisional protection only.

PRENTISS.
5th November 1860.

2707. E. FREEMAN PRENTISS, of the City of Philadelphia, in the United States of America, Manufacturing Chemist, for an invention for—" Improvements in the combination of chemical materials forming a 'mordant' for dying wool and woollen goods." *Letters Patent sealed.*

PRENTISS.
5th November 1860.

2708. ELIJAH FREEMAN PRENTISS, of the City of Philadelphia, in the United States of America, Manufacturing Chemist, for an invention for—" A new detergent."
Letters Patent sealed.

LANCASTER.
5th November 1860.

2709. JOHN LANCASTER, of Garden Farm, Dunmurry, Belfast, for an invention for—" An improved mowing and reaping machine." *Letters Patent sealed.*

RIDLEY.
5th November 1860.

2710. JOHN RIDLEY, of Stagshaw, in the County of Northumberland, Gentleman, for an invention for—" Improvements in reaping and mowing machines."
Provisional protection only.

WEBSTER.
5th November 1860.

2711. JAMES WEBSTER, of Birmingham, in the County of Warwick, Engineer, for an invention for—" Improvements in obtaining gas (mainly oxygen) for improving artificial light and for other purposes, also for utilizing the products resulting from its manufacture." *Letters Patent sealed; no specification filed.*

SEED.
5th November 1860.

2712. BENJAMIN SEED, of Great Horton Lane, Bradford, in the County of York, Manager, for an invention for—" Improvements in apparatus used in the treatment of soap suds or other saponaceous or oily matters, which apparatus is also applicable in the treatment of other matters." *Provisional protection only.*

LEVERSON.
6th November 1860.

2713. MONTAGUE RICHARD LEVERSON, of No. 12, Saint Helen's Place, in the City of London, Solicitor and Patent Agent, for an invention for—" Improvements in fire-arms."—*A communication to him from abroad from William Henry Smith, of the City of Philadelphia, in the United States of North America, Doctor of Medicine.*
Letters Patent sealed.

GREEN. 6th November 1860.

2714. WILLIAM GREEN, of New Bond Street, in the County of Middlesex, Gun and Rifle Manufacturer, for an invention for—"Improvements in fire-arms breech-loading." *Letters Patent sealed.*

VAUGHAN. 6th November 1860.

2715. EDWARD PRIMEROSE HOWARD VAUGHAN, of No. 15, Southampton Buildings, Chancery Lane, in the County of Middlesex, Patent Agent, for an invention for —"An improved plug for boats." *Provisional protection only.*

FROGGATT. 6th November 1860.

2716. JOHN FROGGATT, junior, of Lenton, in the County of Nottingham, Doubler, for an invention for—"An improvement in apparatus for burning gas." *Letters Patent sealed.*

HEWITT. 6th November 1860.

2717. WILLIAM HEWITT, of Birmingham, in the County of Warwick, Manufacturer, for an invention for—"An improvement or improvements in whip holders or whip sockets." *Letters Patent sealed.*

RAMMELL. 6th November 1860.

2718. THOMAS WEBSTER RAMMELL, of Number 6, Victoria Street, Westminster, in the County of Middlesex, Civil Engineer, for an invention for—"Improvements in centrifugal discs revolving in air, water and other fluids, and in the application of motive-power by such discs." *Letters Patent sealed.*

JONES. 6th November 1860.

2719. WILLIAM JONES, of 246, High Holborn, in the County of Middlesex, Machinist, for an invention for—"Improvements in machines or presses and apparatus attached thereto for stamping or embossing paper or other substances." *Letters Patent sealed.*

PEARCE. BOWLES. 6th November 1860.

2720. WILLIAM PEARCE, of Poole, Dorset, Engineer & Machinist, and EDWARD BOWLES, of Little Canford, for an invention for—"Improvements in apparatus for ploughing land." *Provisional protection only.*

BIRKS. BIRKS. 6th November 1860.

2721. WILLIAM BIRKS, the elder, of the Town of Nottingham, Machinist, and WILLIAM BIRKS, the younger, of the same Town, Machinist, for an invention for —"Improvements in bobbin net or twist lace machinery." *Letters Patent sealed.*

THORNTON. 6th November 1860.

2722. HENRY THORNTON, of Wardington, Oxon, for an invention for—"Improvements in sheds for sheep." *Provisional protection only.*

GYTON. 6th November 1860.

2723. JOHN BENSTEAD GYTON, of Grimsthorp, in the County of Lincoln, for an invention for—"Improvements in paddle wheels." *Provisional protection only.*

NEUMANN. 6th November 1860.

2724. CAESAR NEUMANN, of the City of New York, in the County of New York, State of New York, U. S. A., for an invention for—"Certain improvements in the manufacture of hoop skirts and in the machinery employed therein." *Letters Patent sealed.*

ASPREY. 6th November 1860.

2725. CHARLES ASPREY, of New Bond Street, and Albemarle Street, in the County of Middlesex, Dressing Case and Travelling Bag Maker, for an invention for —"An improvement in locks for bags, dressing cases and other articles," *Letters Patent sealed.*

HOWE. 6th November 1860.

2726. ELIAS HOWE, the younger, of Oxford Street, in the County of Middlesex, Engineer, for an invention for—"Improvements in projectiles."—*A communication to him from abroad by John Webster Cochran, of New York.* *Letters Patent sealed.*

BROOMAN. 6th November 1860.

2727. RICHARD ARCHIBALD BROOMAN, of 166, Fleet Street, in the City of London, Patent Agent, for an invention for—"An improvement in the manufacture of forks and spoons."—*A communication to him from abroad by Adolphe Joseph Coque, and Alexandre François Chavet, of Paris.* *Provisional protection only.*

HIGGINS. WHITWORTH. 6th November 1860.

2728. JAMES HIGGINS, of Salford, in the County of Lancaster, Machine Maker, and THOMAS SCHOFIELD WHITWORTH, of the same place, Manager, for an invention for—"Improvements in machinery or apparatus for preparing cotton and other fibrous materials for spinning." *Letters Patent sealed.*

SMITH. 6th November 1860.

2729. THOMAS WONTNER SMITH, of the Lower Road, Islington, in the County of Middlesex, Color Maker, for an invention for—"An improved process for obtaining pigments." *Letters Patent sealed.*

WILSON. 6th November 1860.

2730. GEORGE WILSON, of the City of York, Glass Manufacturer, for an invention for—"An improved construction of stoppered bottle." *Letters Patent sealed.*

COBLEY. 6th November 1860.

2731. THOMAS COBLEY, of Meerholz, in the Electorate of Hesse, Germany, Mine Owner, for an invention for—"Improvements in the method of treating poor ores of copper." *Letters Patent sealed.*

SALISBURY. 6th November 1860.

2732. EDWARD SALISBURY, of Preston, County of Lancaster, for an invention for—"An improved mixture or solution to be applied to pickers, picking-bands, straps, sole leather and such like materials, in order to harden them and render them more lasting." *Letters Patent sealed; no specification filed.*

COOKE. 7th November 1860.

2733. WILLIAM COOKE, of Charing Cross, in the County of Middlesex, Civil Engineer, for an invention for—"Improvements in ventilating." *Letters Patent sealed.*

RENNEL. 7th November 1860.

2734. PAUL WALKER RENNEL, of Plumstead, in the County of Kent, Licensed Victualler, for an invention for—"Improvements in the method of and apparatus for treating green, semigreen, or undried vegetables or plants in order to reduce their fibrous portions to a pulp, and also in the application of the said pulp when so made to the manufacture of paper." *Letters Patent sealed.*

CLARK. 7th November 1860.

2735. JOHN CLARK, of the Metropolitan Light Company, No. 447, Strand, in the County of Middlesex, for an invention for—"Improvements in outside shop-lights." *Letters Patent sealed.*

HYDES. 7th November 1860.

2736. WILLIAM KITCHEN HYDES, of Liverpool, in the County of Lancaster, Engineer, for an invention for—"Improvements in steam-engines and boilers, and in the mode or method of forming or shaping sheets or plates of metal for certain parts of the same." *Provisional protection only.*

RATCLIFF. RATCLIFF. 7th November 1860.

2737. JOSEPH and EDMUND RATCLIFF, General Lamp Manufacturers, of Birmingham, in the County of Warwick, for an invention for—"Certain improvements in lamps for lighting vestibules, halls or other like places." *Letters Patent sealed.*

DRESSEL. LEVESTAMM. 7th November 1860.

2738. ROBERT DRESSEL and FERDINAND LEVESTAMM, both of New Oxford Street, in the County of Middlesex, General Agents, for an invention for—"Improvements in stoves." *Provisional protection only.*

CHURCH. 7th November 1860.

2739. JOHN CHURCH, of Boxworth, in the County of Cambridge, Brick and Tile Maker, for an invention for—"A brick and tile machine." *Provisional protection only.*

BROOMAN. 7th November 1860.

2740. RICHARD ARCHIBALD BROOMAN, of 166, Fleet Street, in the City of London, Patent Agent, for an invention for—"Improvements in liquid and fluid meters." *—A communication to him from abroad by Louis Constant Uhler, of Paris.* *Letters Patent sealed.*

FOX. 7th November 1860.

2741. SAMUEL FOX, of Deepcar, near Sheffield, for an invention for—"Improvements in furnaces used in melting steel and other metals where crucibles or pots are employed." *Letters Patent sealed.*

SEDLEY. 7th November 1860.

2742. ANGELO JAMES SEDLEY, of 210, Regent Street, in the County of Middlesex, for an invention for—"Improvements in chairs, sofas and other articles of furniture used to sit or recline upon." *Letters Patent sealed.*

NEWTON. 7th November 1860.

2743. WILLIAM EDWARD NEWTON, of the Office for Patents, 66, Chancery Lane, in the County of Middlesex, Civil Engineer, for an invention for—"Improved apparatus for obtaining motive-power from air."—*A communication to him from abroad by George Marshall, of New York, in the United States of America.* *Letters Patent sealed.*

MAIDEN. HALL. 7th November 1860.

2744. ISAIAH MAIDEN, and EDWARD HALL, of Ashton-under-Lyne, in the County of Lancaster, Engineers, for an invention for—"Improvements in slide valves for steam-engines." *Provisional protection only.*

NEWTON. 7th November 1860.

2745. ALFRED VINCENT NEWTON, of the Office for Patents, 66, Chancery Lane, in the County of Middlesex, Mechanical Draughtsman, for an invention for—"An improved mode of and apparatus for sewing."—*A communication to him from abroad by William Cleveland Hicks, of Boston, in the United States of America.* *Provisional protection only.*

CUTTS. 8th November 1860.

2746. JAMES CUTTS, of Liverpool, in the County of Lancaster, Engineer and Machinist, for an invention for—"Improvements in apparatus for ascertaining or indicating the number of persons that may pass through or over any particular place, applicable to omnibusses and other vehicles, theatres, ferrys, gardens, baths and other places." *Provisional protection only.*

HUSSON.
8th November 1860.

2747. FRANÇOIS CHARLES HUSSON, of Paris, France, Manufacturer, for an invention for—"Improvements in power-looms." *Provisional protection only.*

FITTÈRE.
8th November 1860.

2748. JEAN PIERRE FITTÈRE, of Castelnau Magnoac, in the Department of the Hautes Pyrénées, in the Empire of France, Joiner, for an invention for—"Improvements in portable sawing machines." *Letters Patent sealed.*

DISTIN.
SIEBE.
8th November 1860.

2749. HENRY JOHN DISTIN, of No. 9, Great Newport Street, Leicester Square, in the County of Middlesex, Musical Instrument Manufacturer, and AUGUSTUS HENRY SIEBE, of No. 12, Baker Street, Portman Square, in the said County, Watch and Clock Maker, for an invention for—"Improvements in instruments for determining the movement of musical compositions, and which are also applicable for other purposes." *Letters Patent sealed.*

HENSON.
8th November 1860.

2750. WILLIAM FREDERICK HENSON, of New Cavendish Street, Portland Place, in the County of Middlesex, for an invention for—"Certain improved fabrics made entirely or partially of alpaca or mohair." *Letters Patent sealed.*

ROLLINSON.
ROLLINSON.
8th November 1860.

2751. JOHN ROLLINSON, of Pensnett, in the County of Stafford, Engineer, and WILLIAM ROLLINSON, of Brierley Hill, in the County of Stafford, Engineer, for an invention for—"An improvement or improvements in working the brakes of winding engines." *Letters Patent sealed.*

BENNETT.
8th November 1860.

2752. THOMAS PETER BENNETT, of Gilnow Mills, near Bolton-le-Moors, in the County of Lancaster, Manager, for an invention for—"Certain improvements in or applicable to mules for spinning." *Provisional protection only.*

PRESTON.
KENNEDY.
8th November 1860.

2753. FRANCIS PRESTON, of the City of Manchester, Engineer, and THOMAS KENNEDY, of Kilmarnock, in the County of Ayr, North Britain, Gun Maker, for an invention for—"Improvements in projectiles for fire-arms and ordnance." *Letters Patent sealed.*

SIMPSON.
8th November 1860.

2754. GEORGE SIMPSON, of Glasgow, in the County of Lanark, North Britain, Civil and Mining Engineer, for an invention for—"Improvements in pumps." *Letters Patent sealed.*

GILLIES.
8th November 1860.

2755. JAMES GILLIES, of Glasgow, in the County of Lanark, North Britain, Turner, for an invention for—"Improvements in valves for steam-engines." *Provisional protection only.*

AITKEN.
8th November 1860.

2756. JOHN AITKEN, of Dalry, in the County of Ayr, North Britain, Clockmaker, for an invention for—"Improvements in clocks." *Provisional protection only.*

NEWTON.
8th November 1860.

2757. ALFRED VINCENT NEWTON, of the Office for Patents, 66, Chancery Lane, in the County of Middlesex, Mechanical Draughtsman, for an invention for—"Improvements in the construction of sewing-machines."—*A communication to him from abroad by William Cleveland Hicks, of Boston, in the United States of America.* *Provisional protection only.*

WESTHEAD.
8th November 1860.

2758. EDWARD WESTHEAD, of Manchester, in the County of Lancaster, Merchant, for an invention for—"Improvements in boiling or evaporating soap, saline solutions or other liquid substance." *Provisional protection only.*

STEVENS.
9th November 1860.

2759. CHARLES STEVENS, Manager of the British & Foreign Office for Patents, 1B, Welbeck Street, Cavendish Square, in the County of Middlesex, for an invention for—"An improved machine for raising water."—*A communication to him from abroad by Jean Baptiste Guignes, of Marseille, in the Empire of France.* *Complete specification; Letters Patent sealed.*

WALLIS.
9th November 1860.

2760. JOHN WILLIAM WALLIS, of Fenchurch Street, in the City of London, Stationer, for an invention for—"Improvements in book indexes." *Letters Patent sealed.*

CHESTERMAN.
9th November 1860.

2761. JAMES CHESTERMAN, of Sheffield, in the County of York, Engineer, for an invention for—"Improvements in tents, marquees and other like articles, parts of which are applicable to umbrellas and parasols; also in machinery for manufacturing parts thereof." *Letters Patent sealed.*

LEWIS.
9th November 1860.

2762. DANIEL BALDOCK LEWIS, of Cheltenham, in the County of Gloucester, Chemist and Druggist, for an invention for—"Improved apparatus for propelling steam vessels." *Provisional protection only.*

SPENCE.
10th November 1860.

2763. WILLIAM SPENCE, of 50, Chancery Lane, in the County of Middlesex, Patent Agent, for an invention for—"Improvements in breech loading fire-arms."—*A communication to him from abroad by Edward Maynard, of the City of Washington, in the District of Columbia, and United States of America.* *Letters Patent sealed.*

FORSTER.
10th November 1860.

2764. WILLIAM CHARLTON FORSTER, of Gibson Street, Lambeth, in the County of Surrey, Gentleman, for an invention for—"An improved method of manufacturing soluble silicate of potash." *Letters Patent sealed.*

TROUVÉ.
10th November 1860.

2765. FORTUNÉ TROUVÉ, of No. 4, Rue du Bouloi, in the City of Paris, in the Empire of France, Gentleman, for an invention for—"A system of publicity called 'Memento agenda,' otherwise an illustrated general cabinet and pocket agenda." *Letters Patent sealed.*

DAFT.
POLE.
10th November 1860.

2766. THOMAS BARNABAS DAFT, of 2, Queen Square, Westminster, and WILLIAM POLE, of 3, Storey's Gate, Westminster, for an invention for—"Improvements in the fish joints of railways." *Letters Patent sealed.*

GLEN.
10th November 1860.

2767. JOHN GLEN, of Glasgow, in the County of Lanark, North Britain, Engraver, for an invention for—"Improvements in machinery, apparatus or means for engraving or producing printed surfaces." *Letters Patent sealed.*

WILSON.
10th November 1860.

2768. EDWARD BROWN WILSON, of Parliament Street, in the City of Westminster, Engineer, for an invention for—"Improvements in the manufacture of railway wheels, tyres, axles, and points and crossings, which improvements are also applicable to the manufacture of ordnance tubes and metal cylinders generally." *Letters Patent sealed.*

PEDDER.
12th November 1860.

2769. JOHN THOMAS PEDDER, India-Rubber Worker, of 85, Murray Street, New North Road, Hoxton, in the Parish of St. Leonard's, Shoreditch, Middlesex, for an invention for—"A machine for the preservation of life in case of fire in dwelling houses and other buildings." *Provisional protection only.*

WALTON.
12th November 1860.

2770. FREDERICK WALTON, of Haughton Dale, Denton, near Manchester, for an invention for—"Improvements in insulating telegraphic conductors." *Letters Patent sealed.*

WEST.
12th November 1860.

2771. HIRAM EDWIN WEST, of Attleborough, in the State of Massachusetts, of the United States of America, for an invention for—"A machine for pressing and shaping straw hats or various other articles of like character." *Complete specification; Letters Patent sealed.*

WILLIAMS.
13th November 1860.

2772. VALENTINE VAUGHAN WILLIAMS, of No. 13, Crosby Row, Walworth Road, in the County of Surrey, for an invention for—"An improved method of constructing stands for cameras, telescopes, surveying and other instruments, parts of which are applicable to other purposes." *Provisional protection only.*

WOOD.
13th November 1860.

2773. JOHN WOOD, of the City of Manchester, in the County of Lancaster, Embroiderer, for an invention for—"Improvements in threading needles for embroidering machines, and also an improved method of working the same." *Provisional protection only.*

THOMSON.
13th November 1860.

2774. DAVID THOMSON, of Grosvenor Road, Pimlico, for an invention for—"Certain improvements in rotatory pumps for raising water and other liquids." *Letters Patent sealed.*

MENNONS.
13th November 1860.

2775. MARC ANTOINE FRANÇOIS MENNONS, of the British and Foreign Patent Offices, 39, Rue de l'Echiquier, Paris, in the Empire of France, for an invention for—"An improved manufacture of coverings for the head."—*A communication from Gustave Victor Roger, a person resident at Crouy-sur-Ourcq, Dept. de Seine-et-Marne (France).* *Letters Patent sealed.*

MENNONS.
13th November 1860.

2776. MARC ANTOINE FRANÇOIS MENNONS, of the British and Foreign Patent Offices, 39, Rue de l'Echiquier, Paris, in the Empire of France, for an invention for—"Improvements in the motive mechanism of cabinet organs and other cylinder musical instruments of that class."—*A communication from Lodovico Gavioli, a person resident at Paris.* *Letters Patent sealed.*

HENRIONNET.
BOBLIQUE.
13th November 1860.

2777. MATHIEU LOUIS HENRIONNET, and LÉOPOLD OCTAVE BOBLIQUE, of 39, Rue de l'Echiquier, Paris, in the Empire of France, for an invention for—"Improvements in the treatment of fossil and other mineral phosphates of lime." *Letters Patent sealed.*

MENNONS. 13th November 1860.

2778. MARC ANTOINE FRANÇOIS MENNONS, of the British and Foreign Patent Offices, 39, Rue de l'Echiquier, Paris, in the Empire of France, for an invention for —"Certain improvements in the construction of organ pipes."—*A communication from Claudio Gavioli, a person resident at Paris.* *Letters Patent sealed.*

WILLIAMS. 13th November 1860.

2779. JOSHUA WILLIAMS, of Saint Ann's Street, Salisbury, in the County of Wilts, for an invention for—"An improved method of obtaining and applying motive-power." *Provisional protection only.*

NEWTON. 13th November 1860.

2780. ALFRED VINCENT NEWTON, of the Office for Patents, 66, Chancery Lane, in the County of Middlesex, Mechanical Draughtsman, for an invention for—"An improved construction of feathering paddle wheel."—*A communication to him from abroad by Byron Densmore, of Brockport, in the County of Monroe, and State of New York, in the United States of America.* *Letters Patent sealed.*

ROBERTS. 13th November 1860.

2781. WILLIAM ROBERTS, of Millwall, Poplar, Engineer, for an invention for—"Improvements in pumps." *Letters Patent sealed.*

HUGHES. 13th November 1860.

2782. THOMAS HUGHES, of Wolverhampton, in the County of Stafford, Tin Plate Worker, for an invention for—"An improvement in spittoons." *Provisional protection only.*

JUCKES. 13th November 1860.

2783. JOHN JUCKES, of 97, Newgate Street, in the City of London, for an invention for—"Improvements in stoves and fire places." *Letters Patent sealed.*

SACCARDO. 13th November 1860.

2784. LUIGI SACCARDO, of Schio, Venetia, Gentleman, for an invention for—"An improved apparatus and arrangement of paper for the substitution of this latter instead of the cards of jacquard looms." *Letters Patent sealed.*

DEROIDE. DUPOUY. 13th November 1860.

2785. ANDRÉ DEROIDE, Chemist, and VITAL DUPOUY, Bleacher, both of Paris, France, for an invention for—"An improved method and apparatus for bleaching all descriptions of vegetable textile fabrics and yarns." *Provisional protection only.*

CLARK. 13th November 1860.

2786. WILLIAM CLARK, of 53, Chancery Lane, in the County of Middlesex, Engineer and Patent Agent, for an invention for—"Improvements in looms."—*A communication to him from abroad by Mr. Benoit Barlet, of 29, Boulevart St. Martin, Paris, Manufacturer.* *Letters Patent sealed.*

BROOKES. 14th November 1860.

2787. WILLIAM BROOKES, of 73, Chancery Lane, in the County of Middlesex, Patent Agent, for an invention for—"Improvements in means or apparatus employed in weaving."—*A communication to him from abroad by Julius Boeddinghaus, of Elberfeld, in the Kingdom of Prussia.* *Letters Patent sealed.*

WAITHMAN. WAITHMAN. 14th November 1860.

2788. ROBERT WILLIAM WAITHMAN, of Bentham, in the County of York, and JOSEPH WAITHMAN, of the City of Manchester, in the County of Lancaster, Manufacturers, for an invention for—"Improvements in the manufacture of cords, twines and similar articles, and in the machinery or apparatus employed therein." *Letters Patent sealed.*

FURNIVAL. 14th November 1860.

2789. RICHARD FURNIVAL, of Manchester, in the County of Lancaster, Engineer, for an invention for—"Improvements in machinery or apparatus for cutting paper, textile fabrics and other articles or materials." *Letters Patent sealed.*

SHARP. 14th November 1860.

2790. FREDERICK EDWARD SHARP, of No. 3, Gloucester Terrace, Blackheath, in the County of Kent, for an invention for—"An improved portable rifle battery."—*A communication to him from abroad by Thomas Martin, a Major in Her Majesty's 4th Regiment of Foot, resident at Aden.* *Provisional protection only.*

ROBERTSON. HETHERINGTON. 14th November 1860.

2791. WILLIAM ROBERTSON, of the City of Manchester, Engineer, and JOHN MUIR HETHERINGTON, of the Vulcan Works, in the City of Manchester, Machine Maker, for an invention for—"Certain improvements in mules for spinning." *Letters Patent sealed.*

CROSLAND. 14th November 1860.

2792. JAMES STEAD CROSLAND, of Johnson Brook, near Hyde, in the County of Chester, Engineer, for an invention for—"Certain improvements in steam-engines." *Letters Patent sealed.*

BLAKELY. 14th November 1860.

2793. THEOPHILUS ALEXANDER BLAKELY, Captain Half Pay Royal Artillery, of Holywood, County Down, for an invention for—"An improved method of increasing the strength of steel and wrought iron." *Letters Patent sealed.*

GRATRIX.
14th November 1860.

2794. ROBERT HODGSON GRATRIX, of Salford, in the County of Lancaster, Dyer and Printer, for an invention for—"Improvements in obtaining colouring matters for dyeing and printing."—*The result partly of a communication made to him from abroad by Matthias Paraf, of Thann, in the Empire of France, and partly of invention and discovery made by him.* *Letters Patent sealed.*

LING.
14th November 1860.

2795. SAMUEL LING, of Heywood, in the County of Lancaster, Engineer, for an invention for—"Improvements in apparatus for lubricating steam-engines." *Provisional protection only.*

BRUCE.
COTTAM.
14th November 1860.

2796. JAMES ANDREW BRUCE, of Leamington, in the County of Warwick, and GEORGE HALLEN COTTAM, of St. Pancras Iron Works, Old St. Pancras Road, in the County of Middlesex, for an invention for—"Improvements in hay racks." *Letters Patent sealed.*

REEVES.
14th November 1860.

2797. JOHN FRY REEVES, of 11, Walpole Street, Chelsea, in the County of Middlesex, Gentleman, for an invention for—"Improvements in the manufacture of paper." *Letters Patent sealed.*

SCHOFIELD.
SCHOFIELD.
15th November 1860.

2798. JOHN SCHOFIELD, of Oldham, in the County of Lancaster, Machinist, and MILES SCHOFIELD, of the same place, Machine Joiner, for an invention for—"Certain improvements in machinery or apparatus for doubling yarns of cotton or other fibrous materials." *Letters Patent sealed.*

MATTHEWS.
15th November 1860.

2799. JOHN MATTHEWS, of Burton-upon-Trent, in the County of Stafford, Brewer for Messrs. Bass and Company, for an invention for—"Improvements in brewing." *Provisional protection only.*

CROOKE.
15th November 1860.

2800. JOHN CROOKE, of Manchester, in the County of Lancaster, Packer, for an invention for—"Certain improvements in the method or means of packing bales of goods or merchandize by means of the hydraulic press." *Letters Patent sealed.*

UNWIN.
UNWIN.
ASKHAM.
15th November 1860.

2801. PHILIP UNWIN, JOHN UNWIN, and JOHN UNWIN ASKHAM, of the firm of Unwin and Rodgers, of 124, Rockingham Street, Sheffield, in the County of York, Cutlery Manufacturers, for an invention for—"A saloon barrel pistol knife." *Letters Patent sealed.*

HENRY.
15th November 1860.

2802. ALEXANDER HENRY, of Edinburgh, in the County of Mid Lothian, North Britain, Gun Maker, for an invention for—"Improvements in rifled fire-arms." *Letters Patent sealed.*

BAGSHAW.
15th November 1860.

2803. GEORGE BAGSHAW, of Preston, in the County of Lancaster, Engine Tenter, for an invention for—"An improved arrangement of the flues of steam-boilers for consuming smoke." *Letters Patent sealed.*

RALSTON.
15th November 1860.

2804. WILLIAM HENRY RALSTON, Analytical Chymist, of Keele, in the County of Staffordshire, for an invention for—"Improvements in the manufacture of soda ash." *Letters Patent sealed.*

AMOTT.
15th November 1860.

2805. GEORGE ROUGHTON BROMAGE AMOTT, of Queen Street, Ross, in the County of Hereford, Cabinet Maker, for an invention for—"An improved plough with mortice chisel and plough iron combined." *Provisional protection only.*

NEWTON.
15th November 1860.

2806. ALFRED VINCENT NEWTON, of the Office for Patents, 66, Chancery Lane, in the County of Middlesex, Mechanical Draughtsman, for an invention for—"Improvements in sewing-machines."—*A communication to him from abroad by Dwight Tracy, of Worcester, in the State of Massachusetts, and United States of America.* *Provisional protection only.*

BROOMAN.
15th November 1860.

2807. RICHARD ARCHIBALD BROOMAN, of 166, Fleet Street, in the City of London, Patent Agent, for an invention for—"An improvement in the manufacture and in the welding of steel and wrought and cast iron."—*A communication to him from abroad by Charles Funk, of Paris.* *Provisional protection only.*

BROOMAN.
15th November 1860.

2808. RICHARD ARCHIBALD BROOMAN, of 166, Fleet Street, in the City of London, Patent Agent, for an invention for—"Improvements in sword bayonets and other swords."—*A communication to him from abroad by François Jules Manceaux, of Paris.* *Letters Patent sealed.*

RIDLEY.
15th November 1860.

2809. JOHN RIDLEY, of Stagshaw, in the County of Northumberland, Gentleman, for an invention for—"An improved method of effecting the combustion of fuel and of products arising therefrom." *Provisional protection only.*

GILL.
15th November 1860.

2810. GEORGE GILL, of 37, Francis Street, Newington, in the County of Surrey, Engineer and Naval Architect, for an invention for—"Improvements in 'steam rams' and other 'ships of war' for the purpose of doing away with the necessity of employing 'rifled cannon' or other 'long range ordnance' against armour plated and other ships in maritime engagements." *Provisional protection only.*

STEVENS.
16th November 1860.

2811. CHARLES STEVENS, Manager of the British and Foreign Office for Patents, 1B, Welbeck Street, Cavendish Square, in the County of Middlesex, for an invention for—"Improvements in sheet-iron tiles."—*A communication to him from abroad by Count du Vigier, and Viscount du Vigier de Mirabel, of Paris, in the Empire of France.* *Letters Patent sealed.*

BÉZIAT.
16th November 1860.

2812. JEAN CIRILLE MARIUS BÉZIAT, of 51, Rue de Malte, Paris, in the Empire of France, for an invention for—"Improvements in the means or apparatus employed for permitting, stopping and regulating the passage of steam, water and gases." *Letters Patent sealed.*

WILLIAMS.
16th November 1860.

2813. CHARLES WYE WILLIAMS, of Liverpool, in the County Palatine of Lancaster, Gentleman, for an invention for—"Improvements in steam-boilers for increasing the evaporative effect thereof, applicable also to stills and other like vessels or apparatus." *Letters Patent sealed.*

DREWE.
16th November 1860.

2814. HENRY GREGORY DREWE, of Chelsea, in the County of Middlesex, Gentleman, for an invention for—"Improvements in propelling vessels and in the apparatus or mechanism for the same." *Provisional protection only.*

STOCKLEY.
16th November 1860.

2815. JOSEPH STOCKLEY, of Newcastle-on-Tyne, in the County of Northumberland, Engineer, for an invention for—"Improvements in apparatus for grinding, smoothening, and polishing plate glass." *Letters Patent sealed.*

MOURGUET.
16th November 1860.

2816. JEAN BAPTISTE MOURGUET, of No. 6, Rue Boucher, in the City of Paris, in the Empire of France, Gunsmith, for an invention for—"Improvements in fire-arms and ordnance, and in projectiles used therewith." *Letters Patent sealed.*

WILSON.
16th November 1860.

2817. EDWARD BROWN WILSON, of Parliament Street, in the City of Westminster, Engineer, for an invention for—"Improvements in the manufacture of railway wheels and other articles of cast steel or malleable cast iron." *Letters Patent sealed.*

BODMER.
16th November 1860.

2818. RUDOLPH BODMER, of 2, Thavies Inn, Holborn, in the City of London, for an invention for—"Improvements in machinery or apparatus for folding and for folding and stitching sheets of paper and other material."—*A communication to him from abroad by Dr. Carl Bernhard Gruner, and Dr. George Adolph Keller, trading under the firm of Maschinenbauanstalt Frauenfeld, of Frauenfeld, in the Republic of Switzerland.* *Letters Patent sealed.*

FLEET.
16th November 1860.

2819. BENJAMIN FLEET, of East Street, Walworth, in the County of Surrey, Soda Water Manufacturer, for an invention for—"Improvements in apparatus for cutting and rounding wood." *Provisional protection only.*

WELTON.
MONCKTON.
16th November 1860.

2820. THOMAS WELTON, of No. 29, New Compton Street, Soho, and EDWARD HENRY CRADOCK MONCKTON, of the Parthenon Club, No. 16, Regent Street, both in the County of Middlesex, for an invention for—"Improvements in the application of electricity or magnetism to the human body for the relief of pain and cure of disease." *Letters Patent sealed.*

BROOMAN.
16th November 1860.

2821. RICHARD ARCHIBALD BROOMAN, of 166, Fleet Street, in the City of London, Patent Agent, for an invention for—"Improvements in joining or connecting together pipes and tubes."—*A communication to him from abroad by Louis Alexandre Farjon, of Paris.* *Letters Patent sealed.*

WOODHOUSE.
16th November 1860.

2822. WILLIAM HENRY WOODHOUSE, of Parliament Street, in the City of Westminster, Civil Engineer, for an invention for—"An improved method of and instrument for measuring distances." *Letters Patent sealed.*

THOMAS.
DE BATHE.
16th November 1860.

2823. WILLIAM LYNALL THOMAS, of Southsea, in the County of Hants, Gentleman, and HENRY PERCIVAL DE BATHE, Colonel Scots Fusileer Guards, for an invention for—"Improvements in the construction of plates or shields for the purpose of resisting shot and other projectiles." *Letters Patent sealed.*

LAVATER.
16th November 1860.

2824. MANUEL LEOPOLD JONAS LAVATER, of Guildford Street, York Road, Lambeth, in the County of Surrey, for an invention for—"Improvements in portable or syphon filters." *Letters Patent sealed.*

DAHMEN.
16th November 1860.

2825. MATHIAS ANTONY JOSEPH DAHMEN, of Park Road, New Peckham, in the County of Surrey, Engineer, for an invention for—"Improvements in treating vegetable fibrous substances in the manufacture of paper." *Letters Patent sealed.*

GLOVER.
16th November 1860.

2826. GEORGE GLOVER, of 8, Queen Square, in the County of Middlesex, for an invention for—"Improvements in apparatus used in measuring gas." *Letters Patent sealed.*

MORRISON.
16th November 1860.

2827. ALFRED MORRISON, of Nottingham, for an invention for—"Improvements in locks." *Provisional protection only.*

RADCLIFFE.
17th November 1860.

2828. JACOB HENRY RADCLIFFE, Iron and Tin Plate Worker, King Street' Oldham, Lancashire, for an invention for—"Improvements in lubricating or oiling vessels and in apparatus connected therewith." *Letters Patent sealed.*

BLACKBURN.
CARR.
17th November 1860.

2829. BEWICKE BLACKBURN, of York Buildings, Adelphi, in the County of Middlesex, and HENRY CARR, of Victoria Street, Westminster, for an invention for —"Improvements in axle boxes." *Letters Patent sealed.*

JONES.
17th November 1860.

2830. THOMAS MORETON JONES, of Finchley Common, in the County of Middlesex, Mechanician, for an invention for—"An improved apparatus for containing, igniting and holding wax taper and other matches." *Letters Patent sealed.*

LÉVÊQUE.
17th November 1860.

2831. ALEXANDRE LOUIS LÉVÊQUE, of Paris, France, Gentleman, for an invention for—"An improved apparatus for carburating or naphthalizing lighting gas." *Provisional protection only.*

MACFARLANE.
17th November 1860.

2832. HUGH MACFARLANE, of Glasgow, in the County of Lanark, North Britain, Photographic Artist, for an invention for—"Improvements in cameras such as are used by photographers." *Provisional protection only.*

BARRETT.
17th November 1860.

2833. BARNABAS BARRETT, of St. Giles Road, in the City of Norwich, Sculptor, for an invention for—"Improvements in the treatment of natural and artificial stone, and in the manufacture or production of artificial stone." *Provisional protection only.*

HOGG.
HOGG.
HOGG.
17th November 1860.

2834. JAMES HOGG, the elder, of Edinburgh, in the County of Edinburgh, and JAMES HOGG, the younger, and JOHN HOGG, of London, in the County of Middlesex, for an invention for—"Improvements in ornamenting the edges of cloth bound books." *Provisional protection only.*

FORD.
19th November 1860.

2835. HENRY FORD, of Birmingham, in the County of Warwick, Japanner, for an invention for—"Improvements in coating or enamelling paper, pasteboard, cardboard, cloth, silk or other similar fabrics." *Complete specification; protection for SIX months only.*

JOWETT.
19th November 1860.

2836. HENRY ALFRED JOWETT, of Sawley, in the County of Derby, Civil Engineer, for an invention for—"Improvements in the method of heating or firing ovens for the manufacture of pottery and porcelain by means of gas and in apparatus connected therewith." *Provisional protection only.*

VANDENBURGH.
19th November 1860.

2837. ORIGEN VANDENBURGH, temporarily residing in London, of the State of New York, for an invention for—"Improvements in projectiles to be used in guns and ordnance and improvements in the appliances for their projection." *Letters Patent sealed.*

CHOWEN.
19th November 1860.

2838. GEORGE CHOWEN, of Dippertown, Lew Down, Crediton, Devon, for an invention for—"Improvements in obtaining motive power by hydraulic means." *Provisional protection only.*

BUTLIN.
19th November 1860.

2839. WILLIAM BUTLIN, of Northampton, in the County of Northampton, Engineer, for an invention for—"Improvements in machinery or apparatus for stamping and ramming, to be chiefly applied to and used for the purpose of paving." *Provisional protection only.*

NEWTON.
19th November 1860.

2840. WILLIAM EDWARD NEWTON, of the Office for Patents, 66, Chancery Lane, in the County of Middlesex, Civil Engineer, for an invention for—"Impro
of and apparatus for supplying air to the furnace or furnaces or to the
steam vessels by means of the paddle-wheels."—*A communication to h*
by Louis Brandt, Indianola, Calhoun County, Texas. *Provision*

MACNEILL. 20th November 1860.

2841. THOMAS TELFORD MACNEILL, of Mount Pleasant, Dundalk, in the County of Lowth, in Ireland, for an invention for—"Improved means of obtaining adhesion on railways for ascending inclines and other purposes."
Letters Patent sealed.

BROOMAN. 20th November 1860.

2842. RICHARD ARCHIBALD BROOMAN, of 166, Fleet Street, in the City of London, Patent Agent, for an invention for—"Improvements in stoppers for bottles, jars and other like articles, parts of which are applicable as fastenings."—*A communication to him from abroad by Louis Alexandre Farjon, of Paris. Letters Patent sealed.*

HAMILTON. 20th November 1860.

2843. JOHN HAMILTON, Jun^{r}, of Liverpool, in the County of Lancaster, Engineer, for an invention for—"Improvements in tubular wrought iron telegraph posts." *Letters Patent sealed.*

PALLING. 20th November 1860.

2844. FRANCIS PALLING, of Esher Street, Lambeth, in the County of Surrey, for an invention for—"Certain improvements in fountain pens."
Provisional protection only.

NEWTON. 20th November 1860.

2845. ALFRED VINCENT NEWTON, of the Office for Patents, 66, Chancery Lane, in the County of Middlesex, Mechanical Draughtsman, for an invention for—"An improvement in the construction of spring hinges."—*A communication to him from abroad by George Bowen Pierson, of the City of New York. Letters Patent sealed.*

POCHIN. 21st November 1860.

2846. HENRY DAVIS POCHIN, of Oakfield House, Salford, in the County of Lancaster, Manufacturing Chemist, for an invention for—"An improved material for building and other purposes." *Provisional protection only.*

MARLAND. 21st November 1860.

2847. JOHN MARLAND, of Ivy Cottage, Hunslet, Leeds, for an invention for—"Improvements in warping and sizeing yarn and thread." *Letters Patent sealed.*

CAIL. 21st November 1860.

2848. GEORGE HENRY CAIL, of Southampton, in the County of Southampton, Painter, for an invention for—"Improvements in the manufacture of manure."
Letters Patent sealed.

JOHNSON. 21st November 1860.

2849. JOHN HENRY JOHNSON, of 47, Lincoln's Inn Fields, in the County of Middlesex, and of 166, Buchanan Street, in the City of Glasgow, North Britain, Gentleman, for an invention for—"Improvements in the manufacture of boots and shoes, and of a new material to be employed therein, which material is applicable to various other useful purposes."—*A communication to him from abroad by Messieurs Dufay Brothers and Company, of Paris, in the Empire of France.*
Provisional protection only.

CLARK. 21st November 1860.

2850. WILLIAM CLARK, of 53, Chancery Lane, in the County of Middlesex, Engineer and Patent Agent, for an invention for—"Improvements in journal or axle boxes for railway carriages whereby to effect the better lubrication of the frictional surfaces."—*A communication to him from abroad by Mr. James Hervey Deming, of Paris, in the Empire of France, Gentleman. Letters Patent sealed.*

DEARDEN. 21st November 1860.

2851. HENRY DEARDEN, of Rochdale, in the County of Lancaster, Overlooker, for an invention for—"Improvements in machinery or apparatus for punching washers for giving the necessary drag or friction to the spindles and bobbins of spinning machinery and similar purposes, and also in the method of using or working the said washers." *Provisional protection only.*

CROSSLEY. 21st November 1860.

2852. JOHN CROSSLEY, of Todmorden, in the County of York, Iron Moulder, for an invention for—"Improvements in means or apparatus for moulding iron or other metals." *Provisional protection only.*

COOKE. 21st November 1860.

2853. WILLIAM COOKE, of Charing Cross, in the County of Middlesex, Civil Engineer, for an invention for—"Improvements in ventilating."
Letters Patent sealed.

HOWDEN. 21st November 1860.

2854. JAMES HOWDEN, of Glasgow, in the County of Lanark, Engineer, for an invention for—"Improvements in steam-engines and boilers, and in the apparatus connected therewith." *Letters Patent sealed.*

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...IAM COPE, WILLIAM GEORGE WARD, and EDWARD COPE, of New ...tingham, Manufacturers, for an invention for—"Improvements in
Letters Patent sealed.

HEINEMANN. 21st November 1860.

2856. LOUIS HEINEMANN, of Broad Street Buildings, in the City of London, Importer, for an invention for—"Improved means whereby engine drivers and persons in charge of or attending to railway trains may obtain intelligence or information, for increased safety in travelling." *Provisional protection only.*

MYRING. 21st November 1860.

2857. CHARLES MYRING, of Walsall, in the County of Stafford, Bridle Cutter, for an invention for—"Improvements in the manufacture of covered harness furniture, buckles, slides and other similar articles, and in the machinery or apparatus to be employed in such manufacture." *Letters Patent sealed.*

VARLEY. VARLEY. 22nd November 1860.

2858. SAMUEL ALFRED VARLEY, of 7, York Place, Kentish Town, and CROMWELL FLEETWOOD VARLEY, of 4, Fortess Terrace, Kentish Town, in the County of Middlesex, for an invention for—"Improvements in the regulation of heat, parts of the invention being applicable to other purposes." *Complete specification; Letters Patent sealed.*

HENRY. 22nd November 1860.

2859. JOHN HENRY, of Buchanan Street, Glasgow, in the County of Lanark, N.B., Manufacturer, for an invention for—"Improvements in printing warps and in apparatus for the same." *Letters Patent sealed.*

KEBLE. 22nd November 1860.

2860. THOMAS HARMAN KEBLE, of Margate, in the County of Kent, Publisher, for an invention for—"Improvements in fire-arms." *Letters Patent sealed.*

RALSTON. 22nd November 1860.

2861. WILLIAM HENRY RALSTON, of Keele, near Newcastle-under-Lyme, in the County of Stafford, for an invention for—"Improvements in the manufacture of hydrate of soda." *Letters Patent sealed.*

JOBSON. 22nd November 1860.

2862. ROBERT JOBSON, of Dudley, in the County of Worcester, Engineer, for an invention for—"Improvements in moulding articles of earthenware or porcelain, and in apparatus used therein." *Letters Patent sealed.*

LOVICK. 22nd November 1860.

2863. WILLIAM FREDERICK LOVICK, of Thorpe, near Norwich, in the County of Norfolk, Gentleman, for an invention for—"An improved bridle bit, which he terms a check-snaffle-bit, for restraining vicious or hard mouthed horses with greater facility than with any other bit." *Provisional protection only.*

BROOMAN. 22nd November 1860.

2864. RICHARD ARCHIBALD BROOMAN, of 166, Fleet Street, in the City of London, Patent Agent, for an invention for—"Improvements in apparatus for communicating continuous rotary motion from manual power."—*A communication to him from abroad by Guillaume Auguste Schuchard, and Ferdinand Frederic Bentel, of Paris.* *Provisional protection only.*

AULD. 22nd November 1860.

2865. DAVID AULD, of Glasgow, in the County of Lanark, North Britain, Engineer, for an invention for—"Improvements in regulating the pressure and flow of fluids." *Letters Patent sealed.*

VENABLES. 23rd November 1860.

2866. JOHN VENABLES, of Burslem, in the County of Staffordshire, for an invention for—"An improved mode or modes of ornamenting the surfaces of earthenware, also applicable to the ornamenting of other useful articles." *Letters Patent sealed.*

DERING. 23rd November 1860.

2867. GEORGE EDWARD DERING, of Lockleys, near Welwyn, Herts, for an invention for—"Improvements in the permanent ways of railways." *Letters Patent sealed.*

CAROSIN. 23rd November 1860.

2868. JAMES FELIX CAROSIN, of the Mauritius, but temporary of 4, South Street, Finsbury, in the County of Middlesex, Gentleman, for an invention for—"Improvements in treating cane-trash."—*A communication to him from abroad by Joseph François Hugoulin, of the Island of Réunion.* *Letters Patent sealed.*

MONKHOUSE. 23rd November 1860.

2869. ELLIOTT MONKHOUSE, of No. 6, Caledonian Terrace, Cooks Ground, in the Parish of Saint Luke, Chelsea, in the County of Middlesex, Working Engineer, for an invention for—"Improvements in the construction and manufacture, and the fixing or fastening, and the mobility, adjustment and readjustment of circular and polygonal heel plates for boots, shoes and clogs." *Letters Patent sealed.*

MANWARING. 23rd November 1860.

2870. WILLIAM MANWARING, of Banbury, in the County of Oxford, Engineer, for an invention for—"Improvements in the gearing of mowing and other light portable machines." *Letters Patent sealed.*

KEIRBY. 23rd November 1860.

2871. EDWARD KEIRBY, of Gatehead Mill, Greetland, near Halifax, in the County of York, India-rubber Manufacturer, for an invention for—"Improvements in covering, insulating and preserving telegraphic wires and cables." *Provisional protection only.*

COUPE.
23rd November 1860.

2872. JOHN COUPE, of Blackburn, in the County of Lancaster, Manager, for an invention for—"Improvements in power looms for weaving."
Provisional protection only.

ANDERSON.
23rd November 1860.

2873. JAMES ANDERSON, of No. 92, Farringdon Street, in the City of London, for an invention for—"Improvements in preparing potatoes for boiling or cooking."
Letters Patent sealed.

BENIOWSKI.
23rd November 1860.

2874. BARTHOLOMEW BENIOWSKI, of Bow Street, in the City of Westminster, Gentleman, for an invention for—"Improvements in the manufacture of types and in cases to be used therewith." *Letters Patent sealed.*

HUMFREY.
HUMFREY.
23rd November 1860.

2875. CHARLES HUMFREY, and CHARLES HUMFREY, the younger, both of Wareham, in the County of Dorset, Oil and Candle Manufacturers, for an invention for—"Improvements in distilling coal and peat, and bituminous and coaly minerals, and in the treatment of the products therefrom." *Provisional protection only.*

BARTHOLOMEW.
23rd November 1860.

2876. GEORGE BARTHOLOMEW, of the Town and County of Linlithgow, North Britain, Edge Tool Maker, for an invention for—"Improvements in boots, shoes, clogs and goloshes." *Provisional protection only.*

IZOD.
BEECH.
23rd November 1860.

2877. EDWIN IZOD, and ROBERT BEECH, of 13A, Grocers' Hall Court, Poultry, in the City of London, for an invention for—"Improvements in the manufacture of stay cloth." *Provisional protection only.*

GAMBLE.
ELLIS.
23rd November 1860.

2878. THOMAS GAMBLE, and EDWIN ELLIS, both of Nottingham, for an invention for—"Improvements in machinery for producing looped fabrics."
Letters Patent sealed.

HALE.
WALL.
23rd November 1860.

2879. THOMAS HALE, of No. 21, Barnsbury Row, Park Road, Islington, in the County of Middlesex, Gentleman, & ARTHUR WALL, of Canton Street, East India Road, in the County of Middlesex, Gentleman, for an invention for—"Improvements in the construction and internal arrangement of furnaces, and in the preparation, manufacture and treatment of clays and bricks and other articles made of clay, earthenware, or stone used for the above and other structures."
Provisional protection only.

CHABROL.
BERSON.
24th November 1860.

2880. PIERRE CELSE HIPPOLYTE CHABROL, and ALEXANDRE BERSON, 51, Rue de Malte, Paris, in the Empire of France, for an invention for—"Improvements in the making of cages and aviaries for birds." *Provisional protection only.*

DALGLISH.
24th November 1860.

2881. ANDREW ADIE DALGLISH, of Glasgow, in the County of Lanark, North Britain, Designer, for an invention for—"Improvements in engraving or for producing printed surfaces." *Letters Patent sealed.*

BOWDITCH.
24th November 1860.

2882. WILLIAM RENWICK BOWDITCH, of Saint Andrew's, Wakefield, York, Clerk, for an invention for—"Improvements in the purification of coal gas and of coal oils." *Letters Patent sealed.*

HARRISON.
TAYLOR.
24th November 1860.

2883. ROBERT HARRISON, of Bacup, in the County of Lancaster, Mechanic, and GEORGE TAYLOR, of the same place, Carder, for an invention for—"Improvements in machinery or apparatus for preparing cotton and other fibrous substances for spinning." *Letters Patent sealed.*

PALMER.
24th November 1860.

2884. CHRISTOPHER RICHARD NORRIS PALMER, of Southampton, Hants, Gentleman, for an invention for—"A new portable and improved fixed signal apparatus." *Letters Patent sealed.*

WALKER.
24th November 1860.

2885. SAMUEL WALKER, the younger, of Edgbaston, in the County of Warwick, Manufacturer, for an invention for—"New or improved machinery to be used in the manufacture of twisted, reeded and other ornamental metallic tubes."
Letters Patent sealed.

JOHNSON.
24th November 1860.

2886. JOHN HENRY JOHNSON, of 47, Lincoln's Inn Fields, in the County of Middlesex, and of 166, Buchanan Street, in the City of Glasgow, North Britain, Gentleman, for an invention for—"Improvements in sewing-machines."—*A communication to him from abroad by the Grover and Baker Sewing Machine Company, of New York, in the United States of America.* *Letters Patent sealed.*

BENTON.
24th November 1860.

2887. THOMAS BENTON, of Sheffield, in the County of York, for an invention for—"Improvements in the manufacture of bells, and in alloys of metals to be used in the manufacture of bells." *Letters Patent sealed.*

DORGEVAL.
24th November 1860.

2888. POLYDORE DORGEVAL, of Lyon, in the Empire of France, for an invention for—"Improvements in machinery used in the manufacture of silk and other fabrics." *Letters Patent sealed.*

FOWLER.
BURTON.
GREIG.
24th November 1860.

2889. JOHN FOWLER, the younger, ROBERT BURTON, and DAVID GREIG, all of Leeds, in the County of York, Mechanical Engineers, for an invention for—"Improvements in apparatus for raising, lowering and hauling weights." *Letters Patent sealed.*

FOX.
24th November 1860.

2890. SAMUEL MICKLE FOX, of the City and State of New York, United States of America, for an invention for—"Improvements in rails for railways, and in the wheels of carriages to run thereon, especially adapted to street railways." *Letters Patent sealed.*

LIEGH.
24th November 1860.

2891. WALTER LEIGH, of Goulden Terrace, Richmond Road, Dalston, in the County of Middlesex, Gentleman, for an invention for—"An improved indicator for railway carriages." *Letters Patent sealed.*

HADWEN.
26th November 1860.

2892. JOHN WILSON HADWEN, of Kebroyd Mills, in the Parish of Halifax, and West Riding of the County of York, Cotton Spinner, for an invention for—"Improvements in the treatment of silk waste, waste silk or silken fibre, and in the manufacture of yarns and tissues from the same whether alone or in admixture with other materials." *Letters Patent sealed.*

PEARSON.
SPURR.
SMITH.
26th November 1860.

2893. WILLIAM PEARSON, and WILLIAM SPURR, of Birstal, in the County of York, Engineers and Machine Makers, and THOMAS SMITH, of the same place, Mechanic, for an invention for—"Improvements in looms for weaving woollens." *Letters Patent sealed.*

TRAIN.
26th November 1860.

2894. GEORGE FRANCIS TRAIN, of Liverpool, in the County of Lancaster, Merchant, for an invention for—"Improvements applicable to street-railway carriages, part of which are suitable for other purposes."—*A communication to him from abroad by Ralph Nowell Musgrove, residing at Philadelphia, United States of America.* *Letters Patent sealed.*

TRAIN.
26th November 1860.

2895. GEORGE FRANCIS TRAIN, of Liverpool, in the County of Lancaster, Merchant, for an invention for—"Improvements in steam-carriages and the running gear for street and other railways."—*A communication to him from abroad by Messrs. Grice and Long, residing in the City of Philadelphia, in the United States of America.* *Letters Patent sealed.*

MOY.
26th November 1860.

2896. THOMAS MOY, of Clifford's Inn, in the City of London, Mechanical Engineer and Naval Architect, for an invention for—"Improvements in direct action steam-engines and pumps." *Provisional protection only.*

SHIRTCLIFFE.
26th November 1860.

2897. WILLIAM RICHMOND SHIRTCLIFFE, of Spring Lane, Sheffield, in the County of York, Agent, for an invention for—"Improvements in warm baths." *Provisional protection only.*

BIRKITT.
26th November 1860.

2898. JAMES BIRKITT, of Pemberton Village, near Wigan, in the County of Lancaster, for an invention for—"Improved musical instruments particularly applicable to piano-fortes and other such like instruments." *Provisional protection only.*

ROBERTS.
26th November 1860.

2899. SAMUEL ROBERTS, of Hull, in the County of York, Engineer, for an invention for—"Improvements in harrows." *Letters Patent sealed.*

MACKENZIE.
HAMILTON.
26th November 1860.

2900. GEORGE MACKENZIE, of Paisley, in the County of Renfrew, North Britain, Thread Manufacturer, and JOHN HAMILTON, of Glasgow, in the County of Lanark, North Britain, Commission Merchant, for an invention for—"Improvements in bobbins or holders for textile materials." *Letters Patent sealed.*

OXLAND.
26th November 1860.

2901. ROBERT OXLAND, of Plymouth, for an invention for—"Improvements in the manufacture of gunpowder." *Provisional protection only.*

HUGON.
26th November 1860.

2902. PIERRE HUGON, of Paris, in the French Empire, Civil Engineer, for an invention for—"An improved mode of firing or igniting explosive gaseous compounds in motive-power engines." *Provisional protection only.*

JACQUET.
26th November 1860.

2903. CLAUDE HIPPOLYTE JACQUET, of Lyons, in the French Empire, Merchant, for an invention for—"An improved calendar clock." *Provisional protection only.*

SHARP.
BULMER.
26th November 1860.

2904. ISAAC SHARP, of Middlesborough, in the County of York, Estate Agent, and WILLIAM BULMER, of the same place, Brick and Tile Maker, for an invention for—"Improvements in apparatuses for the manufacture and for the drying of bricks, tiles and other like ware." *Letters Patent sealed.*

SEILER.
26th November 1860.

2905. FREDERIC SEILER, of Paris, in the French Empire, Engineer, for an invention for—"An improved apparatus applicable to ships, boats and other navigable vessels, for preventing the dangers of shipwreck at sea or in rivers, and for diminishing their draught of water." *Provisional protection only.*

ENNIS.
26th November 1860.

2906. GEORGE ENNIS, of Jersey, Brass Founder, for an invention for—"An improved construction of oyster dredger." *Letters Patent sealed.*

MANTON.
ISLIP.
26th November 1860.

2907. JOHN SHAKESPEARE MANTON, of Birmingham, in the County of Warwick, Manufacturer, and THOMAS ISLIP, of the same place, Button Maker, for an invention for—"Certain improved compositions useful for many purposes in connection with the arts and manufactures, and in machinery or apparatus to be employed therewith, which machinery or apparatus is also applicable to several other purposes of utility." *Letters Patent sealed.*

WOOD.
27th November 1860.

2908. WILLIAM SELBY WOOD, of Chislehurst, in the County of Kent, for an invention for—"An improved arrangement of apparatus for curing smoky chimnies, and for ventilating purposes." *Letters Patent sealed.*

ROBERTSON.
27th November 1860.

2909. ROBERT ROBERTSON, of Glasgow, in the County of Lanark, North Britain, Asphalte Manufacturer, for an invention for—"Improvements in machinery or apparatus for preparing asphalte." *Provisional protection only.*

WANOSTROCHT.
27th November 1860.

2910. VINCENT WANOSTROCHT, of Parkstone, near Poole, in the County of Dorset, for an invention for—"An improvement in the manufacture of mineral tar." *Provisional protection only.*

FOWLER.
27th November 1860.

2911. JOHN FOWLER, of Waterford, Ireland, Gentleman, for an invention for—"Improvements in boots, shoes, gaiters, leggings, and overshoes." *Letters Patent sealed; no specification filed.*

SMETHURST.
27th November 1860.

2912. JOSEPH SMETHURST, of the firm of Messrs. Martin and Smethurst, of Guide Bridge, in the County of Lancaster, Engineers, for an invention for—"Improvements in slide valves of steam-engines, and for other purposes where slide valves are employed." *Provisional protection only.*

BEATTY.
ALEXANDER.
27th November 1860.

2913. FRANCIS STEWART BEATTY, of 16, College Green, Dublin, in the County of Dublin, Ireland, Lithographer and Photographer, and THOMAS ALEXANDER, of Kilester House, in same County, Doctor of Medicine, for an invention for—"Improvements in the production of photographic proofs and their application to printing purposes." *Letters Patent sealed.*

PAPE.
27th November 1860.

2914. THOMAS PAPE, of the Town and County of Nottingham, Glove Manufacturer, for an invention for—"Improvements in circular frames for manufacturing glove and other fabrics, and in apparatuses for stitching and finishing the finger ends of gloves, and for 'boarding' gloves." *Provisional protection only.*

LECOMTE-ALLIOT.
28th November 1860.

2915. JEAN BAPTISTE LECOMTE-ALLIOT, of Paris, in the Department of Seine, in the Empire of France, Gentleman, for an invention for—"A machine for waxing and rubbing apartments." *Letters Patent sealed.*

ROBB.
28th November 1860.

2916. JOHN ROBB, of the City of Aberdeen, North Britain, Merchant, for an invention for—"Improvements in gas stoves." *Letters Patent sealed.*

SIDEBOTTOM.
28th November 1860.

2917. JOHN SIDEBOTTOM, of Harewood, near Mottram, in the County of Chester, Cotton Spinner and Manufacturer, for an invention for—"Improvements in reeds and in apparatus for forming the lease or shed in machines for sizing, dressing, warping, and weaving." *Provisional protection only.*

THOMAS.
28th November 1860.

2918. REBECCA THOMAS, of Bath Street, Tabernacle Square, in the County of Middlesex, for an invention for—"Improvements in venetian blinds for windows." *Provisional protection only.*

MARDELL.
28th November 1860.

2919. DAVID MARDELL, of York Terrace, York Square, Commercial Road East, in the County of Middlesex, Engineer, for an invention for—"Improvements in steam-engines & in obtaining feed water for marine steam-engine boilers." *Provisional protection only.*

GRAFTON.
28th November 1860.

2920. HENRY GRAFTON, of 80, Chancery Lane, in the County of Middlesex, Engineer, for an invention for—"Improvements in the application of machinery to the cultivation of land." *Provisional protection only*

GRAFTON. 28th November 1860.

2921. HENRY GRAFTON, of 80, Chancery Lane, in the County of Middlesex, Engineer, for an invention for—"Improvements in apparatus or machinery for cultivating land." *Letters Patent sealed.*

REEVES. 28th November 1860.

2922. JOHN REEVES, of Brooklyn, New York, in the United States of America, for an invention for—"Improvements in the construction of ships." *Provisional protection only.*

GILLETT. 28th November 1860.

2923. HENRY GILLETT, of the firm of Messrs. Howell James and Company, of Regent Street, in the County of Middlesex, for an invention for—"Improvements in the ornamentation of the edges of the leaves of photographic albums especially intended for 'cartes de visite.'" *Provisional protection only.*

AGER. 28th November 1860.

2924. NATHAN AGER, of 77, Upper Ebury Street, Pimlico, S.W., for an invention for—"Improvements in apparatus for raising building materials." *Letters Patent sealed.*

HOLMES. 28th November 1860.

2925. THOMAS HOLMES, of Anlaby Road, Hull, Tanner, for an invention for—"Improvements in preparing and in tanning hides and skins." *Letters Patent sealed; no specification filed.*

THOMSON. 28th November 1860.

2926. SAMUEL THOMSON, of Motherwell, in the County of Lanark, North Britain, Doctor of Medicine, for an invention for—"Improvements in the manufacture of iron." *Provisional protection only.*

JEYES. 28th November 1860.

2927. JOHN JEYES, of 17, Cheyne Walk, Chelsea, for an invention for—"Improvements in the manufacture of boots and shoes." *Letters Patent sealed.*

BETHUNE. 29th November 1860.

2928. Sir JOHN TROTTER BETHUNE, of 39, Rue de l'Echiquier, Paris, in the Empire of France, Baronet, for an invention for—"Improvements in the production of motive-power, by application of the dead weight of liquids, and in the apparatus connected therewith." *Provisional protection only.*

GILBEE. 29th November 1860.

2929. HENRY GILBEE, of No. 4, South Street, Finsbury, in the County of Middlesex, for an invention for—"Improvements in welding."—*A communication to him from abroad by Michel Helson, of Paris, in the Empire of France.* *Letters Patent sealed.*

HIRSCH. 29th November 1860.

2930. HERMANN HIRSCH, of Berlin, in the Kingdom of Prussia, and of Bridge Road, Lambeth, in the County of Surrey, Civil Engineer, for an invention for—"Improvements in screw propellers." *Letters Patent sealed.*

DARLEY. 29th November 1860.

2931. WILLIAM DARLEY, of Bishop Bridge, Market Rasen, in the County of Lincoln, Engineer, for an invention for—"Improvements in portable steam-engines." *Provisional protection only.*

OFFORD. 29th November 1860.

2932. ROBERT OFFORD, junior, of 79, Wells Street, Oxford Street, in the County of Middlesex, Carriage Builder, for an invention for—"Improvements in the adaptation of india-rubber and compounds thereof to wheels." *Letters Patent sealed.*

STORM. 29th November 1860.

2933. WILLIAM MONTGOMERY STORM, of New York, in the United States of America, Mechanical Engineer, for an invention for—"Improvements in the construction of breech-loading firearms." *Letters Patent sealed.*

JACQUES. FANSHAWE. JACQUES. 29th November 1860.

2934. JAMES ARCHIBALD JACQUES, Chemist, and JOHN AMERICUS FANSHAWE, Engineer, both of Tottenham, in the County of Middlesex, and GEORGE JACQUES, of Bromley, in the same County, Gentleman, for an invention for—"An improved mode of and apparatus for cooling liquids." *Letters Patent sealed.*

FANSHAWE. JACQUES. 29th November 1860.

2935. JOHN AMERICUS FANSHAWE, of Tottenham, in the County of Middlesex, Engineer, and JAMES ARCHIBALD JACQUES, of the same place, Chemist, for an invention for—"Improvements in brushes and other scrubbing and rubbing surfaces." *Letters Patent sealed.*

COLE. GARDNER. 29th November 1860.

2936. THOMAS COLE, of the City of Coventry, Ribbon Weaver, and DAVID GARDNER, of the same City, Ribbon Loom Maker, for an invention for—"Improvements in looms for weaving ribbons and other fabrics." *Letters Patent sealed.*

GILBERT. 30th November 1860.

2937. DAVID GILBERT, of Birmingham, in the County of Warwick, Button Maker, for an invention for—"Inlaying, marking and engraving ivory, vegetable ivory, wood or horn buttons or such as are made of similar materials, by a new process." *Provisional protection NOT granted.*

FRY. 30th November 1860.

2938. JAMES FRY, of Wrotham, near Sevenoakes, County of Kent, Miller, for an invention for—"Improvements in the arrangement and construction of mills for crushing and grinding grain, seeds, oil-cake and like matters, the crushing principle being also applicable to cements, minerals, and ores." *Provisional protection only.*

PERRY. 30th November 1860.

2939. EDWIN CRESWELL PERRY, of Sedgley, in the County of Stafford, Master of Arts, Clerk, for an invention for—"Improvements in preventing accidents in or at mine shafts." *Letters Patent sealed.*

PARSONS. 30th November 1860.

2940. GEORGE PARSONS, of Martock, in the County of Somerset, Engineer, for an invention for—"Improvements in the construction of wheels." *Letters Patent sealed.*

HUGHES. 30th November 1860.

2941. EDWARD THOMAS HUGHES, of the firm of Hughes and Son, Patent Agents, 123, Chancery Lane, London, for an invention for—"Improvements in the manufacture of metal tubes."—*A communication to him from abroad by C. Kesseler, of Greifswald, in the Kingdom of Prussia.* *Letters Patent sealed.*

STEVENS. 30th November 1860.

2942. CHARLES STEVENS, Manager of the British and Foreign Office for Patents, 1B, Welbeck Street, Cavendish Square, in the County of Middlesex, for an invention for—"Improvements in smoke-consuming furnaces."—*A communication to him from abroad by Toni Fontenay, of Grenoble, in the Empire of France.* *Complete specification; Letters Patent sealed.*

PELEGRIN. 30th November 1860.

2943. JACQUES PELEGRIN, of Bordeaux, in the Department of the Gironde, in the Empire of France, Undertaker, for an invention for—"Inodorous basins & descent pipes of glass." *Letters Patent sealed; specification filed by order.*

NEWBERY. 30th November 1860.

2944. RICHARD CHARLES NEWBERY, of 4 & 5, President Street West, Goswell Road, in the County of Middlesex, for an invention for—"Improvements in the manufacture of collars and wristbands." *Letters Patent sealed.*

DAWBARN. 1st December 1860.

2945. ROBERT DAWBARN, of Wisbech, in the County of Cambridge, Merchant, for an invention for—"An apparatus for stopping rents or holes in fire-engine hose and other elastic tubes or pipes."—*A communication to him from abroad by John S. Mackay, of Brooklyn, New York, in the United States of America.* *Letters Patent sealed.*

GREAVES. 1st December 1860.

2946. HUGH GREAVES, of 22, Abingdon Street, in the City of Westminster, in the County of Middlesex, Civil Engineer, for an invention for—"Improvements in the construction of railways, tramways, and in vehicles to run thereon, portions of which improvements are applicable to other useful purposes." *Letters Patent sealed.*

JACKSON. 1st December 1860.

2947. ARTHUR JACKSON, of Liverpool, in the County of Lancaster, Commission Agent, for an invention for—"Improvements in generating steam as adapted to a certain arrangement or construction of steam-engines for transmitting motive-power." *Letters Patent sealed.*

FARMER. FARMER. 1st December 1860.

2948. CHARLES FARMER, of Birmingham, in the County of Warwick, Manufacturer, and WILLIAM FARMER, of Birmingham, aforesaid, Manufacturer, for an invention for—"New or improved machinery for the manufacture of the hooks used principally as dress fastenings." *Letters Patent sealed.*

LOSH. 1st December 1860.

2949. WILLIAM SEPTIMUS LOSH, of Wreay Syke, in the County of Cumberland, Esquire, for an invention for—"A new method of preparing sulphurous acid in solution." *Letters Patent sealed.*

TIZARD. 1st December 1860.

2950. WILLIAM LITTELL TIZARD, of Mark Lane, in the City of London, Engineer, for an invention for—"Improvements in fastening threaded nuts and bolts." *Letters Patent sealed.*

MARSDEN. LAMBERT. 1st December 1860.

2951. ROBERT MARSDEN, of No. 22, Anson Street Park, Sheffield, in the County of York, Blacksmith, and WILLIAM LAMBERT, of No. 9, Castle Hill, Sheffield, aforesaid, Cab Proprietor, for an invention for—"An improvement in horses' shoes." *Provisional protection only.*

RONALD. 1st December 1860.

2952. JAMES RONALD, of Liverpool, in the County of Lancaster, Merchant, for an invention for—"Improvements in machinery for the spinning of hemp, flax, manilla or wool or other like fibrous material." *Letters Patent sealed.*

AUSTIN. 1st December 1860.

2953. JAMES AUSTIN, of Millisle Mills, Donaghadee, in the County of Down, Ireland, Bookkeeper, for an invention for—"Improvements in machinery or apparatus for ploughing or cultivating land, part of which machinery or apparatus may be used as a traction engine." *Letters Patent sealed.*

SHEDDEN.
1st December 1860.

2954. THOMAS SHEDDEN, Ardgartan House, in the County of Argyle, North Britain, Gentleman, for an invention for—"Improvements in ammunition for fire arms and in packing the same for transport, and in the apparatus employed therein." *Letters Patent sealed.*

CLARK.
1st December 1860.

2955. WILLIAM CLARK, of 53, Chancery Lane, in the County of Middlesex, Engineer and Patent Agent, for an invention for—"Improvements in looms."—*A communication to him from abroad by Mr. Joseph Matter, of 29, Boulevart St. Martin, Paris, Mechanician.* *Provisional protection only.*

LEONHARDT.
1st December 1860.

2956. AUGUST LEONHARDT, late of Berlin, but now of Manchester, in the County of Lancaster, Chemist, for an invention for—"Improvements in the preparation of indigo for dyeing and printing, and in obtaining 'pure' or 'refined' indigo." *Letters Patent sealed.*

PIGGOTT.
3rd December 1860.

2957. WILLIAM PETER PIGGOTT, of No. 16, Argyll Street, Regent Street, London, for an invention for—"Improvements in the mode of generating electric currents, manufacturing submarine telegraph cables, and the mode of transmitting signals." *Letters Patent sealed.*

KEEN.
3rd December 1860.

2958. RICHARD EDWARD KEEN, of 15, Old Change, in the City of London, for an invention for—"Improvements in cocks, taps, valves and other apparatus for stopping and regulating the flow of liquids, steam and gas." *Letters Patent sealed.*

PILKINGTON.
3rd December 1860.

2959. WILLIAM PILKINGTON, of Windle Hall, within Windle, in the County of Lancaster, Glass Manufacturer, for an invention for—"Improvements in furnaces for melting glass." *Letters Patent sealed.*

GALLOWAY.
GALLOWAY.
3rd December 1860.

2960. WILLIAM GALLOWAY, and JOHN GALLOWAY, both of Manchester, in the County of Lancaster, for an invention for—"Improvements in steam-boilers." *Letters Patent sealed.*

RICHARDSON.
3rd December 1860.

2961. THOMAS RICHARDSON, of Newcastle-upon-Tyne, for an invention for—"Improvements in the manufacture of paper." *Letters Patent sealed.*

BARKER.
3rd December 1860.

2962. WILLIAM ROBERT BARKER, of Chapel Street, Belgrave Square, in the County of Middlesex, for an invention for—"Improvements in bottles for medicines and poisons." *Provisional protection only.*

HUGHES.
3rd December 1860.

2963. EDWARD THOMAS HUGHES, of the firm of Hughes and Son, Patent Agents, 123, Chancery Lane, London, for an invention for—"Improvements in treating and decomposing fatty matters and in the machinery or apparatus employed therein."—*A communication to him from abroad by Monsieur L. Martin, of 209, Rue St. Jacques, Paris, in the Empire of France.* *Letters Patent sealed.*

LOWDEN.
BUCKLEY.
3rd December 1860.

2964. JOHN LOWDEN, in the Township of Royton, in the County of Lancaster, Carder, and ROBERT BUCKLEY, in the Township of Royton, in the County of Lancaster, Manager, for an invention for—"Certain improvements in carding-engines." *Letters Patent sealed.*

BROOMAN.
3rd December 1860.

2965. RICHARD ARCHIBALD BROOMAN, of 166, Fleet Street, in the City of London, Patent Agent, for an invention for—"Improvements in valves for closets and other receptacles."—*A communication to him from abroad by Pierre Guillaume and Frederic Hippolyte Ouin, of Paris.* *Provisional protection only.*

CARTER.
AUSTEN.
3rd December 1860.

2966. JOSEPH THRELFALL CARTER, of Sydenham, in the County of Kent, Engineer, and JOHN AUSTEN, also of Sydenham, Jobmaster, for an invention for—"An improved method of roughing horse shoes." *Provisional protection only.*

MACFARLANE.
NEWTON.
CARTE.
3rd December 1860.

2967. GEORGE MACFARLANE, of Draycott Street, in the County of Middlesex, Professor of Music, WILLIAM EDWARD NEWTON, of the Office for Patents, 66, Chancery Lane, in the County of Middlesex, Civil Engineer, and RICHARD CARTE, of Charing Cross, in the City of Westminster, Musical Instrument Maker, for an invention for—"Improvements in wind musical instruments." *Letters Patent sealed.*

WHITEHEAD.
3rd December 1860.

2968. THOMAS WHITEHEAD, of Holbeck, in the Parish of Leeds, in the County of York, a partner in the firm of Taylor, Wordsworth, and Company, Machine and Tool Makers, for an invention for—"Improved machinery for combing wool, hair, flax, tow, cotton, silk and other fibrous substances." *Letters Patent sealed.*

JEUNE.
4th December 1860.

2969. WILLIAM RICHARD JEUNE, of No. 4, Flower Terrace, Campbell Road, Bow, in the County of Middlesex, Manufacturer, for an invention for—"Improvements in the manufacture of kamptulicon or covering for floors and for other purposes." *Provisional protection only.*

LEPETIT.
4th December 1860.

2970. MAXIME LEPETIT, of 7, Ware Street, Kingsland Road, in the County of Middlesex, China Gilder, for an invention for—"The making of china and earthenware articles by machinery." *Provisional protection NOT granted.*

HIGGINBOTHAM.
BEECH.
4th December 1860.

2971. EDWIN HENRY HIGGINBOTHAM, of Macclesfield, in the County of Chester, Silk Manufacturer, and AARON BEECH, of the same place, Mechanic, for an invention for—"Certain improvements in machinery or apparatus for the prevention of explosions of steam-boilers arising through deficiency of water or overpressure of steam." *Provisional protection only.*

GREENWOOD.
4th December 1860.

2972. BENJAMIN GREENWOOD, of No. 5, Southfield Square, Manningham, in the Borough of Bradford, and County of York, for an invention for—"Improvements in the manufacture of brooms and other brushes." *Letters Patent sealed.*

WALTER.
HENRŸ.
4th December 1860.

2973. WILLIAM THOMAS WALTER, of Long Acre, in the County of Middlesex, Gold and Silver Refiner, and CHARLES HENRŸ, of Bartholomew Place, Hertford Road, Kingsland, also in the County of Middlesex, Artist, for an invention for—"Improvements in means or processes for obtaining ornamental and other devices or effects on metal, glass, stone, and earthenware." *Letters Patent sealed.*

JAQUES.
4th December 1860.

2974. FRANK JAQUES, of Droylsden, near Manchester, in the County of Lancaster, Captain Commanding the Seventieth Rifle Volunteers, for an invention for—"Improvements in or improved apparatus applicable to rifled or other muskets and to other fire-arms." *Letters Patent sealed.*

MICHAUX.
4th December 1860.

2975. FIDÈLE MICHAUX, of Anzin, of the Département of Nord, in the Empire of France, Machinist, for an invention for—"A new sort of 'safety lamp for mines.'" *Provisional protection only.*

GRIFFITHS.
4th December 1860.

2976. ROBERT GRIFFITHS, of 69, Mornington Road, Hampstead Road, in the County of Middlesex, for an invention for—"Improvements in screw propellor blades." *Provisional protection only.*

STIDOLPH.
SIMPSON.
MORLEY.
STIDOLPH.
4th December 1860.

2977. GEORGE FREDERICK STIDOLPH, of Ipswich, THOMAS SIMPSON, of Woodbridge, JOSEPH ROBERTS MORLEY, also of Woodbridge, and JOHN STIDOLPH, of Ipswich, all in the County of Suffolk, for an invention for—"Improvements in the construction of crates and other packing cases." *Letters Patent sealed.*

JOHNSON.
4th December 1860.

2978. JOHN HENRY JOHNSON, of 47, Lincoln's Inn Fields, in the County of Middlesex, and of 166, Buchanan Street, in the City of Glasgow, North Britain, Gentleman, for an invention for—"Improvements in the construction of clothes dryers or folding racks for airing and drying clothes."—*A communication to him from abroad by John Ward, Junior, of Brooklyn, New York, United States of America, Gentleman.* *Letters Patent sealed.*

PAYNE.
4th December 1860.

2979. JOHN BELLAMY PAYNE, of Chard, in the County of Somerset, Manufacturer, for an invention for—"Improvements in machinery for the manufacture of fishing and other nets." *Letters Patent sealed.*

DUNCAN.
4th December 1860.

2980. CHARLES STEWART DUNCAN, of Hereford Road North, Bayswater, in the County of Middlesex, for an invention for—"Improvements in the construction of electric telegraph cables or ropes." *Letters Patent sealed.*

HART.
5th December 1860.

2981. GEORGE WILLIAM HART, of 9, Stanley Terrace, Southsea, in the Parish of Portsea, in the County of Hants, Engineer, for an invention for—"Improvements in the embrasures of fortifications, and in the port holes of ships of war." *Letters Patent sealed.*

SIEMENS.
5th December 1860.

2982. CHARLES WILLIAM SIEMENS, of 3, Great George Street, Westminster, for an invention for—"Improvements in fluid meters." *Letters Patent sealed.*

LANCASTER.
5th December 1860.

2983. CHARLES WILLIAM LANCASTER, of New Bond Street, in the County of Middlesex, Gun Maker, for an invention for—"Improvements in sights for rifles and other fire-arms." *Letters Patent sealed.*

HALLETT.
5th December 1860.

2984. GEORGE HALLETT, of 52, Broad Wall, Lambeth, in the County of Surry, Antimony Refiner, for an invention for—"Improvements in coating iron and other ships' bottoms and other surfaces." *Letters Patent sealed.*

MOREWOOD.
5th December 1860.

2985. EDMUND MOREWOOD, of Enfield, in the County of Middlesex, for an invention for—"Improvements in coating metals." *Letters Patent sealed.*

GORRILL.
5th December 1860.

2986. BENJAMIN GORRILL, Tool Maker, of Birmingham, in the County of Warwick, for an invention for—"Certain improvements in the making of gilding-tools for gilding or embossing ornaments on leather or other surfaces." *Provisional protection only.*

LINGHAM.
NICKLIN.
5th December 1860.

2987. GEORGE CALLEY LINGHAM, and JOSEPH NICKLIN, trading under the style or firm of Charles Rowley and Company, Button and Clasp Manufacturers and General Stampers and Piercers, of Newhall Street, Birmingham, in the County of Warwick, for an invention for—"Certain improvements in belt-fastenings, and which said improvements are also applicable as a connector for brace-fronts, garters and other articles of dress." *Letters Patent sealed.*

DUMÉRY.
5th December 1860.

2988. CONSTANT JOUFFROY DUMÉRY, of 29, Boulevart St. Martin, Paris, in the Empire of France, Civil Engineer, for an invention for—"A new or improved apparatus for extracting from water or any liquid the bodies in dissolution or in suspension contained therein." *Letters Patent sealed.*

JORDAN.
6th December 1860.

2989. HENRY JORDAN, of Liverpool, in the County of Lancaster, Ship Builder, for an invention for—"Improvements in the construction of ships or other vessels." *Letters Patent sealed.*

PRATT.
6th December 1860.

2990. JOSEPH FRANCIS PRATT, of Oxford Street, in the County of Middlesex, Surgical Instrument Maker, for an invention for—"Improvements in instruments for receiving and transmitting sound, particularly adapted to the relief of deafness." *Provisional protection only.*

GLASS.
6th December 1860.

2991. RICHARD ATWOOD GLASS, of the firm of Glass, Elliot and Company, of Greenwich, in the County of Kent, Submarine Telegraph Cable Manufacturers, for an invention for—"A method of and apparatus for preserving electric telegraph cables and wires prior to their being laid." *Provisional protection only.*

DEAVIN,
6th December 1860.

2992. MARTIN DEAVIN, of Rotherhithe, in the County of Surrey, Builder, for an invention for—"An improved apparatus applicable as a fire-escape, also to the raising and lowering of weights." *Letters Patent sealed.*

MELLODEW.
KESSELMEYER.
WORRALL.
6th December 1860.

2993. THOMAS MELLODEW, of Oldham, in the County of Lancaster, Manufacturer, CHARLES WILLIAM KESSELMEYER, of Manchester, in the said County, Warehouseman, and JOHN MAYO WORRALL, of Salford, in the said County, Dyer, for an invention for—"Improvements in the treatment of velvets, velveteens, and other fabrics on which there are floated weft threads to be cut." *Letters Patent sealed.*

BELLAMY.
6th December 1860.

2994. JOSEPH BELLAMY, of Wednesfield, near Wolverhampton, in the County of Stafford, Manufacturer, for an invention for—"Improvements in traps for taking rats, birds, rabbits, and other animals." *Letters Patent sealed.*

MUSGRAVE.
7th December 1860.

2995. JONATHAN MUSGRAVE, of Bolton-le-Moors, in the County of Lancaster, Engineer, for an invention for—"Improvements in apparatus for regulating the discharge of water from steam pipes." *Letters Patent sealed; no specification filed.*

HADDAN.
7th December 1860.

2996. JOHN COOPE HADDAN, of No. 14, Bessborough Gardens, Pimlico, in the County of Middlesex, Engineer, for an invention for—"Improvements in the manufacture of cannon and of projectiles, part of which improvements is applicable to casting metal." *Provisional protection only.*

GUERIN.
7th December 1860.

2997. PIERRE GUERIN, Engineer, of Cluny, in the Department of Saone et Loire, Empire of France, for an invention for—"Improvements in the hydraulic press." *Letters Patent sealed.*

HILL.
7th December 1860.

2998. CHARLES JOHN HILL, of Froliche Cottage, Turnham Green, in the County of Middlesex, for an invention for—"Improvements in presses for stamping medals, embossing and cutting or punching out metal or paper, and printing on paper, linen, or any other material." *Letters Patent sealed.*

EDWARDS. 7th December 1860.

2999. FREDERIC HOWORTH EDWARDS, of the Town and County of Newcastle-upon-Tyne, Civil Engineer, for an invention for—"Improvements in air engines." *Letters Patent sealed.*

HOLMAN. 7th December 1860.

3000. STEPHEN HOLMAN, of Lewisham, in the County of Kent, Engineer, for an invention for—"Improvements in machinery for communicating motion to and transmitting motion from reciprocating rods." *Letters Patent sealed.*

TURTLE. 7th December 1860.

3001. JOHN BAINTON TURTLE, of 93, Minories, in the City of London, Flag Maker, for an invention for—"Improvements in the means of communicating signals applicable to naval, military and railway purposes." *Letters Patent sealed.*

CLARK. 7th December 1860.

3002. WILLIAM CLARK, of 53, Chancery Lane, in the County of Middlesex, Engineer and Patent Agent, for an invention for—"Improvements in machinery for planing or cutting wood, and in apparatus connected therewith."—*A communication to him from abroad by Mr. Jules Mareschal, of 29, Boulevart St. Martin, Paris, in the Empire of France, Engineer.* *Letters Patent sealed.*

WHEBLE. 7th December 1860.

3003. JAMES JOSEPH WHEBLE, of Reading, in the County of Berks, Esquire, for an invention for—"Improvements in the manufacture of artificial stone for building purposes." *Letters Patent sealed.*

GEORGE. 7th December 1860.

3004. BENJAMIN GEORGE GEORGE, of Hatton Garden, in the City of London, Lithographer, for an invention for—"Improvements in the mounting of tablets or show bills, and also of prints and drawings." *Letters Patent sealed.*

FOXALL. 7th December 1860.

3005. THOMAS FOXALL, of Princes Street, Fitzroy Square, in the County of Middlesex, Tin Plate Worker, for an invention for—"An improved canteen or case for containing refreshments for soldiers or travellers." *Provisional protection only.*

MORRIS. RADFORD. 7th December 1860.

3006. WILLIAM MORRIS, and JOB RADFORD, both of Oldbury, in the County of Worcester, Brickmakers, for an invention for—"Improvements in composition or compositions to be employed in the manufacture of firebricks, fire clay lumps, blocks, retorts, and for all the purposes for which ordinary fire clay is now used, part or parts of which compositions may also be employed as a substitute for emery." *Letters Patent sealed.*

CARY. 8th December 1860.

3007. JOSEPH HENRY CARY, of St. James's Factory, of the City of Norwich, for an invention for—"An improvement in hammer-rails." *Letters Patent sealed.*

DAVIES. 8th December 1860.

3008. GEORGE DAVIES, of No. 1, Serle Street, Lincoln's Inn, in the County of Middlesex, and No. 28, St. Enoch Square, in the City of Glasgow, Civil Engineer and Patent Agent, for an invention for—"Certain improvements in the construction of steam-boilers."—*A communication to him from abroad by Richard Montgomery, of New York, United States of America.* *Letters Patent sealed.*

ROBSON. 8th December 1860.

3009. JAMES ROBSON, Junior, of North Shields, in the County of Northumberland, for an invention for—"Improvements in mineral-oil lamps." *Letters Patent sealed.*

MUSHET. 8th December 1860.

3010. ROBERT MUSHET, of Coleford, in the County of Gloucester, Metallurgist, for an invention for—"An improvement or improvements in the manufacture of an alloy or alloys of titanium and iron." *Letters Patent sealed.*

ROBERTS. 8th December 1860.

3011. THOMAS ROBERTS, of Holborn, in the County of Middlesex, Engineer, for an invention for—"Improvements in the construction of ships and floating batteries, and in rendering them capable of resisting the destructive force of shot, shell, and other missiles." *Letters Patent sealed.*

JONES. 8th December 1860.

3012. MEREDITH JONES, of the Royal Mint, Engineer, for an invention for—"An improvement in apparatuses for preparing the edges of discs of metal for coin." *Letters Patent sealed.*

WHEELER. 8th December 1860.

3013. ARTHUR WHEELER, of Banner Cross, Sheffield, in the County of York, for an invention for—"Improvements in the manufacture of railway carriages, trucks, engines and other vehicles, so far as the balancing power, springs and buffers are concerned." *Provisional protection only.*

JOHNSON. 8th December 1860.

3014. JOHN HENRY JOHNSON, of 47, Lincoln's Inn Fields, in the County of Middlesex, and of 166, Buchanan Street, in the City of Glasgow, North Britain, Gentleman, for an invention for—"Improvements in apparatus for applying capsules to bottles."—*A communication to him from abroad by Jules Mathieu, of Paris, in the Empire of France, Engineer.* *Letters Patent sealed.*

HOCKIN. 8th December 1860.

3015. BARTHOLOMEW HOCKIN, of Limehouse, Engineer, for an invention for—"Improvements in the construction and mode of fitting and working furnaces." *Provisional protection only.*

SIMON. 8th December 1860.

3016. LOUIS SIMON, of the Town and County of the Town of Nottingham, Bronze Powder Manufacturer and Machine Builder, for an invention for—"Improvements in heated air engines." *Letters Patent sealed.*

ANNAN. 8th December 1860.

3017. DAVID ANNAN, of 8, Albert Terrace, Bow, in the County of Middlesex, for an invention for—"Improvements in furnaces and fire bars." *Letters Patent sealed.*

DURRANT. 8th December 1860.

3018. JAMES DURRANT, of 63, Warren Street, Fitzroy Square, in the County of Middlesex, for an invention for—"Improvements in chimney pots or apparatus for the tops of chimneys." *Provisional protection only.*

NEWTON. 8th December 1860.

3019. WILLIAM EDWARD NEWTON, of the Office for Patents, 66, Chancery Lane, in the County of Middlesex, Civil Engineer, for an invention for—"Improved machinery for making bricks."—*A communication to him from abroad by John Caswell, Adolphuss Sinsheimer, and Oran William Seely, all of New York, in the United States of America.* *Letters Patent sealed.*

GRANGER. 10th December 1860.

3020. ARTHUR GRANGER, of 308, High Holborn, London, W.C., Stationer, for an invention for—"Improvements in the manufacture of collars, cuffs, shirt fronts, clergymen's bands, stocks and articles of a like nature." *Letters Patent sealed.*

FILLIETTE. 10th December 1860.

3021. ADOLPHE-JOSEPH FILLIETTE, of 42, Rue Amelot, Paris, in the Empire of France, Mechanical Engineer, for an invention for—"Improvements in presses for copying, stamping, and embossing." *Letters Patent sealed.*

PEAKE. 10th December 1860.

3022. THOMAS PEAKE, of Derby, in the County of Derby, Engineer, for an invention for—"An improved method of locking or 'skidding' the wheels of vehicles for the purpose of retarding or arresting the progress thereof." *Letters Patent sealed.*

BARDE. 10th December 1860.

3023. JOSEPH ANTOINE BARDE, of Paris, France, Gentleman, for an invention for—"An improved portable apparatus for producing and purifying lighting gas." *Letters Patent sealed.*

CLARK. 10th December 1860.

3024. WILLIAM CLARK, of 53, Chancery Lane, in the County of Middlesex, Engineer and Patent Agent, for an invention for—"Improvements in photographic apparatus."—*A communication to him from abroad by Mr. Charles Gustave Anthoni, of 29, Boulevart St. Martin, Paris, in the Empire of France, Mechanician.* *Letters Patent sealed.*

YOUNG. CAIRNS. 10th December 1860.

3025. JAMES YOUNG, and CHRISTOPHER CAIRNS, of Glasgow, in the County of Lanark, North Britain, Foremen Ironfounders, for an invention for—"Improvements in making moulds for casting." *Letters Patent sealed.*

BROOMAN. 10th December 1860.

3026. RICHARD ARCHIBALD BROOMAN, of 166, Fleet Street, in the City of London, Patent Agent, for an invention for—"Improvements in implements for digging and breaking up the soil."—*A communication to him from abroad by Donald Mann, of New York.* *Letters Patent sealed.*

DAVISON. 10th December 1860.

3027. ROBERT DAVISON, of London Street, in the City of London, Civil Engineer, for an invention for—"Improvements in apparatuses for drying and heating." *Letters Patent sealed.*

HUGHES. 10th December 1860.

3028. RICHARD HUGH HUGHES, of Hatton Garden, in the County of Middlesex, Engineer, for an invention for—"Improvements in means or apparatus for supplying fresh air to mines and other places." *Letters Patent sealed.*

HUDSON. 10th December 1860.

3029. ROBERT HUDSON, of Adwalton, near Leeds, in the County of York, Engineer, for an invention for—"Improvements in means or apparatus for the generation of steam." *Letters Patent sealed.*

MUSHET. 10th December 1860.

3030. ROBERT MUSHET, of Coleford, in the County of Gloucester, Metallurgist, for an invention for—"An improvement or improvements in the manufacture of an alloy or alloys of titanium and iron." *Letters Patent sealed.*

NEWTON. 10th December 1860.

3031. WILLIAM EDWARD NEWTON, of the Office for Patents, 66, Chancery Lane, in the County of Middlesex, Civil Engineer, for an invention for—"Improvements in machinery for 'quartering' cork-wood and for cutting the 'quarters' into bottle corks."—*A communication to him from abroad by Alexander Millar, of the City of New York.* *Letters Patent sealed.*

JOHNSON.
10th December 1860.

3032. JOHN HENRY JOHNSON, of 47, Lincoln's Inn Fields, in the County of Middlesex, and of 166, Buchanan Street, in the City of Glasgow, North Britain, Gentleman, for an invention for—"Improvements in electric apparatus for striking the hours on bells."—*A communication to him from abroad by François Guichené, of Paris, in the Empire of France.* *Provisional protection only.*

TOWNSEND.
11th December 1860.

3033. JOSEPH TOWNSEND, of Glasgow, in the County of Lanark, North Britain, Manufacturing Chemist, for an invention for—"Improvements in obtaining animal charcoal and other products from bones and other animal matters." *Provisional protection only.*

CANU.
11th December 1860.

3034. ADOLPHE JOSEPH CANU, Civil Engineer, residing in Paris, Rue Laffitte, Numero 42, in the Empire of France, for an invention for—"An improved pulverising and bruising machine." *Provisional protection only.*

STEVENS.
11th December 1860.

3035. CHARLES STEVENS, Manager of the British and Foreign Office for Patents, 18, Welbeck Street, Cavendish Square, in the County of Middlesex, for an invention for—"An impermeable anti-sulphuric coating for leather."—*A communication to him from abroad by J. Chapa & Lacaze, of 42, Rue Laffite, Paris, in the Empire of France.* *Provisional protecion only.*

FORD.
PAIGE.
11th December 1860.

3036. RICHARD ADAMS FORD, and WILLIAM ADAMS PAIGE, of No. 38, Poultry, in the City of London, for an invention for—"An improved shirt." *Letters Patent sealed.*

HAMERTON.
11th December 1860.

3037. JOSEPH HAMERTON, of Shibden, near Halifax, in the County of York, Manufacturer, for an invention for—"Improvements in manufacturing certain textile fabrics known as 'zebra cloth' or triple cloth." *Provisional protection only.*

TOWNSEND.
WALKER.
11th December 1860.

3038. JOSEPH TOWNSEND, Manufacturing Chemist, and JAMES WALKER, Analytical Chemist, both of Glasgow, in the County of Lanark, North Britain, for an invention for—"Improvements in treating bye products arising in the manufacture of soda and potash for the obtainment of antichlores and other useful products." *Letters Patent sealed.*

VERWEY.
11th December 1860.

3039. ANTON VERWEY, late of 24, Saint Augustine Road, Camden Town, in the County of Middlesex, but now of No. 3, Croydon Grove, Croydon, in the County of Surrey, Manufacturer, for an invention for—"Improvements in the proportions of ingredients and mode of manufacture of a chemical compound for softening water." *Complete specification; Letters Patent sealed.*

WALLICH.
11th December 1860.

3040. GEORGE CHARLES WALLICH, of 17, Campden Hill Road, Kensington, in the County of Middlesex, Doctor of Medicine, for an invention for—"Certain improvements in apparatus for taking deep sea soundings." *Provisional protection only.*

TUCKER.
11th December 1860.

3041. HIRAM TUCKER, of 11, Queen Square, Bloomsbury, in the County of Middlesex, for an invention for—"Improvements in bedsteads." *Letters Patent sealed.*

MASSEY.
11th December 1860.

3042. THOMAS MASSEY, of 4, Birchin Lane, in the City of London, for an invention for—"Improvements in sounding machines." *Letters Patent sealed.*

PYM.
11th December 1860.

3043. JOHN PYM, of 4, Lawrence Pountney Hill, in the City of London, for an invention for—"Improvements in railway sleepers." *Provisional protection only.*

STEART.
11th December 1860.

3044. JAMES STEART, of 5, St. James' Road, Blue Anchor Road, Bermondsey, in the County of Surrey for an invention for—"Improvements in treating skins for the manufacture of leather." *Provisional protection only.*

MUSHET.
12th December 1860.

3045. ROBERT MUSHET, of Coleford, in the County of Gloucester, Metallurgist, for an invention for—"Improvements in the manufacture of cast steel." *Letters Patent sealed.*

HALL.
12th December 1860.

3046. HENRY HALL, of Stack Steads, in the County of Lancaster, Manufacturer, for an invention for—"Improvements in machinery or apparatus for spinning and doubling fibrous materials." *Letters Patent sealed.*

JALOUREAU.
12th December 1860.

3047. ALFRED FAUVIN JALOUREAU, of Paris, in the French Empire, Manufacturer, for an invention for—"Improvements in means or processes for holding, protecting and insulating subterraneous telegraph wires." *Letters Patent sealed.*

NEWEY.
12th December 1860.

3048. HENRY NEWEY, of Birmingham, in the County of Warwick, Umbrella and Parasol Manufacturer, for an invention for—"Improvements in the manufacture of certain parts of umbrellas and parasols." *Provisional protection only.*

SCOTT.
12th December 1860.

3049. JOHN SCOTT, of Sunderland, in the County of Durham, Founder, for an invention for—"Improvements in reefing and furling sails." *Provisional protection only.*

MOODY.
12th December 1860.

3050. CHARLES PETERS MOODY, of Corton Denham, in the County of Somerset, Gentleman, for an invention for—"Improvements in the construction of gates." *Letters Patent sealed.*

HARWOOD.
12th December 1860.

3051. GEORGE SHAW HARWOOD, of Bradford, in the County of York, Agent, for an invention for—"Improved machinery for drying, stretching and tentering woollen or other cloths."—*A communication to him from abroad by Charles F. Bennett, of the State of Connecticut, one of the United States of America. Letters Patent sealed.*

CORNISH.
12th December 1860.

3052. SAMUEL TOM CORNISH, of Beaumont Square, Mile End, in the County of Middlesex, Shipwright, for an invention for—"Improvements in the construction of ships for the purpose of rendering them shot and shell proof." *Provisional protection only.*

RICHARDSON.
CHATTAWAY.
12th December 1860.

3053. GEORGE RICHARDSON, of Mecklenburgh Square, in the County of Middlesex, and EDWIN DANIEL CHATTAWAY, of Bromley, in the same County, Engineers, for an invention for—"Improvements in apparatus for enabling guards and engine drivers of railway trains to communicate with one another." *Letters Patent sealed.*

KYLE.
12th December 1860.

3054. ALEXANDER KYLE, of Binghill, in the County of Aberdeen, North Britain, late Colonel in the 26th Regt., for an invention for—"Improvements in machinery or apparatus for propelling ships or vessels and boats." *Letters Patent sealed.*

LISTER.
WARBURTON.
12th December 1860.

3055. SAMUEL CUNLIFFE LISTER, and JAMES WARBURTON, of Manningham, in the County of York, for an invention for—"Improvements in spinning and doubling." *Provisional protection only.*

PITT.
COX.
12th December 1860.

3056. ROBERT PITT, of Newark Foundry, in the City of Bath, in the County of Somerset, Engineer, and STEPHEN FITCHEW COX, of the City and County of Bristol, Tanner, for an invention for—"Improvements in apparatus employed in the manufacture of leather." *Provisional protection only.*

CASSON.
13th December 1860.

3057. JOHN CASSON, of Wellington Street, Woolwich, in the County of Kent, Grocer, for an invention for—"An improved machine for dressing dried fruits and separating and removing therefrom the stems and other refuse without injury to the fruit." *Letters Patent sealed.*

REYNOLDS.
13th December 1860.

3058. JOHN GEORGE REYNOLDS, of No. 33, Wharf Road, City Road, in the County of Middlesex, Pipe Manufacturer, for an invention for—"Improvements in coating or covering the surfaces of smoking pipes and other articles, fictile, metallic or otherwise, to obtain ornamental and useful effects." *Letters Patent sealed.*

HENSON.
13th December 1860.

3059. ROBERT HENSON, of No. 113A, Strand, London, W.C., Marble Ornament Maker, for an invention for—"Improvements in eye glass and spectacle frames." *Provisional protection only.*

CHANTRELL.
13th December 1860.

3060. GEORGE FREDERIC CHANTRELL, of Liverpool, in the County of Lancaster, Furnace Engineer, for an invention for—"An improved draught generator."—*A communication to him from abroad by Isadore Alleweireldt, residing at Bruges, in Belgium. Letters Patent sealed.*

NEVILLE.
13th December 1860.

3061. CHARLES NEVILLE, of Great Dover Road, in the County of Surrey, Builder, for an invention for—"An improved washing apparatus." *Letters Patent sealed.*

WEST.
13th December 1860.

3062. THOMAS WEST, of Warwick, in the County of Warwick, for an invention for—"An improved apparatus for slicing, shredding and pulping turnips and other roots." *Provisional protection only.*

PITTS.
13th December 1860.

3063. SAMUEL PITTS, of the firm of Messieurs Thurston and Company, of No. 14, Catherine Street, Strand, in the County of Middlesex, Billiard-Table Manufacturers, for an invention for—"Improvements in billiard-tables." *Letters Patent sealed.*

CLARK.
13th December 1860.

3064. WILLIAM CLARK, of 53, Chancery Lane, in the County of Middlesex, Engineer and Patent Agent, for an invention for—"Improvements in the manufacture of gas."—*A communication to him from abroad by Mr. Heber Marini, of Paris, in the Empire of France, Civil Engineer.* *Provisional protection only.*

VANDENBURGH.
13th December 1860.

3065. General ORIGEN VANDENBURGH, of New York, in the United States of America, temporary residing in London, for an invention for—"Improvements in the breech pieces of breech loading cannon." *Provisional protection only.*

EVANS.
EVANS.
13th December 1860.

3066. FREDERICK JOHN EVANS, of the Gas Works, Horseferry Road, in the City of Westminster, Engineer, and GEORGE FREDERICK EVANS, of the Gas Works, Brentford, in the County of Middlesex, Engineer, for an invention for—"Improvements in the manufacture of illuminating gas." *Provisional protection only.*

COOPER.
13th December 1860.

3067. JOSEPH ROCK COOPER, of Birmingham, in the County of Warwick, Gun Manufacturer, for an invention for—"An improvement or improvements in breech loading fire-arms." *Letters Patent sealed.*

JONES.
13th December 1860.

3068. EMANUEL JONES, of the City of Manchester, in the County of Lancaster, Gun Maker, for an invention for—"An improvement or improvements in rifling small arms and ordnance." *Letters Patent sealed.*

REEVES.
13th December 1860.

3069. CHARLES REEVES, of Birmingham, in the County of Warwick, Manufacturer, for an invention for—"Improvements in breech loading fire-arms." *Letters Patent sealed.*

MUSHET.
13th December 1860.

3070. ROBERT MUSHET, of Coleford, in the County of Gloucester, Metallurgist, for an invention for—"Improvements in the manufacture of iron and steel." *Letters Patent sealed.*

CHUBB.
HUNTER.
13th December 1860.

3071. JOHN CHUBB, of St. Paul's Church Yard, in the City of London, Lock and Safe Manufacturer, and EBENEZER HUNTER, of Wolverhampton, Foreman to the said John Chubb, for an invention for—"Improvements in locks." *Letters Patent sealed.*

ALLEN.
13th December 1860.

3072. WILLIAM DANIEL ALLEN, of Laithfield House, Norfolk Road, Sheffield, in the County of York, Steel Manufacturer, for an invention for—"Improvements in the manufacture of the bearings or 'brasses' in which the axles of locomotive engines and carriages revolve, and also in the bearings, 'brasses' and other parts of plummer blocks employed in machinery generally." *Letters Patent sealed.*

MELLO.
13th December 1860.

3073. JOHN ARNOLD MELLO, of Welbeck Street, Cavendish Square, in the County of Middlesex, Gentleman, for an invention for—"Improvements in the manufacture of stereoscopic slides." *Provisional protection only.*

FENTON.
14th December 1860.

3074. JAMES FENTON, of Queen Street, Lincoln's Inn, in the County of Middlesex, Gentleman, for an invention for—"An improved method of securing the wearing tyres on wheels." *Provisional protection only.*

JACKSON.
14th December 1860.

3075. JOHN JACKSON, of 21, West Grove, St. John's Hill, Battersea, in the County of Surrey, Engineer, for an invention for—"Improvements in lamps." *Letters Patent sealed.*

BARAGWANATH.
14th December 1860.

3076. JOHN PHILLIPS BARAGWANATH, of 22, Castle Street, Falcon Square, in the City of London, for an invention for—"Improvements in hydraulic punching apparatus."—*A communication to him from abroad by Richard Dudgeon, of Columbia Street, New York, United States of America.* *Letters Patent sealed.*

CLARK.
14th December 1860.

3077. WILLIAM CLARK, of 53, Chancery Lane, in the County of Middlesex, Engineer and Patent Agent, for an invention for—"Improvements in signalling from one part of a railway train to another."—*A communication to him from abroad by Mr. André Louis Hyacinthe de Goy, of 29, Boulevard St. Martin, Paris.* *Provisional protection only.*

NEWTON.
14th December 1860.

3078. WILLIAM EDWARD NEWTON, of the Office for Patents, 66, Chancery Lane, in the County of Middlesex, Civil Engineer, for an invention for—"Improved pavement for streets."—*A communication to him from abroad by Lucius Stebbins, of the City of New York.* *Letters Patent sealed.*

NEWTON.
14th December 1860.

3079. WILLIAM EDWARD NEWTON, of the Office for Patents, 66, Chancery Lane, in the County of Middlesex, Civil Engineer, for an invention for—"Improved machinery for cutting and rounding corks and bungs."—*A communication to him from abroad by Alexander Millar, of the City of New York.* *Letters Patent sealed.*

BARBER.
14th December 1860.

3080. HARBY BARBER, of Belgrave, in the County of Leicester, Manufacturer, for an invention for—"Improvements in lamps used in mines."
Letters Patent sealed.

BATCHELOR.
14th December 1860.

3081. HENRY BATCHELOR, of Newport, Monmouthshire, Engineer, for an invention for—"Improvements in the construction and manufacture of models of ships, boats or other vessels." *Provisional protection only.*

COLWELL.
15th December 1860.

3082. CHARLES COLWELL, of Belvidere Place, Southwark, Gentleman, for an invention for—"Preventing explosions in coal mines and other places, thereby to save life and property, with other improvements."
Provisional protection NOT granted.

BARTON.
15th December 1860.

3083. NATHANIEL COX BARTON, of Her Majesty's Ship Himalaya, a Lieutenant in the Royal Navy, for an invention for—"An improved scaling ladder for military, naval and other purposes." *Provisional protection only.*

DAVIES.
15th December 1860.

3084. GEORGE DAVIES, of No. 1, Serle Street, Lincoln's Inn, in the County of Middlesex, and No. 28, St. Enoch Square, in the City of Glasgow, Civil Engineer and Patent Agent, for an invention for—"Improvements in building bridges, ships or other structures of iron or other metal."—*A communication to him from abroad by Richard Montgomery, of New York, United States of America.*
Letters Patent sealed.

DAVIES.
15th December 1860.

3085. GEORGE DAVIES, of No. 1, Serle Street, Lincoln's Inn, in the County of Middlesex, and No. 28, St. Enoch Square, in the City of Glasgow, Civil Engineer and Patent Agent, for an invention for—"Certain improvements in rolling and corrugating plates of metal, and in machinery or apparatus employed for such purposes."—*A communication to him from abroad by Richard Montgomery, of New York, United States of America.* *Letters Patent sealed.*

DAVIES.
15th December 1860.

3086. GEORGE DAVIES, of No. 1, Serle Street, Lincoln's Inn, in the County of Middlesex, and No. 28, St. Enoch Square, in the City of Glasgow, Civil Engineer and Patent Agent, for an invention for—"Improvements in the construction of iron or other metal beams, and in the machinery or apparatus employed for such purpose."—*A communication to him from abroad by Richard Montgomery, of New York, United States of America.* *Letters Patent sealed.*

WILLIAMS.
15th December 1860.

3087. JOHN GRIFFITH WILLIAMS, of Blaenavon, in the County of Monmouth, Gas Proprietor, for an invention for—"Improvements in extracting inflammable and other noxious gases from coal and other mines." *Letters Patent sealed.*

KINDER.
15th December 1860.

3088. ARTHUR KINDER, of Great George Street, in the City of Westminster, for an invention for—"Improvements in machinery or apparatus for cutting wood."
Letters Patent sealed.

PRINCE.
15th December 1860.

3089. ALEXANDER PRINCE, of the Office for Patents, 4, Trafalgar Square, Charing Cross, in the County of Middlesex, for an invention for—"Improvements in steam-engines."—*A communication to him from abroad by Francois Joseph de Bayelt, resident at Lyons, in the Empire of France.* *Letters Patent sealed.*

TAYLOR.
17th December 1860.

3090. JOHN GEORGE TAYLOR, Merchant, of Paris, in the Empire of France, for an invention for —"Improvements in dress and other fastenings, and in the application and manufacture thereof." *Provisional protection only.*

STOCKER.
17th December 1860.

3091. ALEXANDER SOUTHWOOD STOCKER, of Wolverhampton, in the County of Stafford, Manufacturer, for an invention for—"Improvements in the manufacture of tyre for wheels." *Letters Patent sealed.*

SZERELMEY.
17th December 1860.

3092. NICHOLAS CHARLES SZERELMEY, of No. 6, Park Terrace, Brixton Road, in the County of Surrey, Gentleman, for an invention for—"An improved method of and apparatus for purifying oils and varnishes." *Letters Patent sealed.*

HILL.
17th December 1860.

3093. JOHN WILLIAM HILL, of No. 3, Philadelphia Place, Hackney Road, Middlesex, for an invention for—"Improvements in sewing-machines and the use thereof." *Provisional protection only.*

MORISON.
17th December 1860.

3094. JAMES MORISON, of Paisley, in the County of Renfrew, North Britain, Machinist, for an invention for—"Improvements in apparatus for spinning or twisting." *Provisional protection only.*

BODMER.
17th December 1860.

3095. RUDOLPH RODMER, of 2, Thavies Inn, Holborn, in the City of London, for an invention for—"Improvements in machinery or apparatus for preventing or modifying the effects of collisions on railways."—*A communication to him from abroad by Giovanni Pagliari, Chemist, of Rome.* *Provisional protection only.*

BARLOW.
NEWHOUSE.
HAMILTON.
17th December 1860.

3096. EDWARD BARLOW, of Bolton-le-Moors, in the County of Lancaster, Machine Maker, JAMES NEWHOUSE, of Farnworth, in the same County, Manager, and FRANCIS HAMILTON, of Bolton-le-Moors, aforesaid, Foreman, for an invention for—"Certain improvements in machinery for carding cotton and other fibrous substances." *Letters Patent sealed and specification filed by order.*

DENNY.
DENNY.
17th December 1860.

3097. ABRAHAM DENNY, and EDWARD MAYNARD DENNY, both of Waterford, Ireland, for an invention for—"Improvements in apparatus for singeing the carcases of dead pigs." *Provisional protection only.*

EDDINGTON.
17th December 1860.

3098. ALFRED EDDINGTON, of Springfield, Chelmsford, in the County of Essex, for an invention for—"Improvements in draining ploughs." *Provisional protection only.*

HENRY.
17th December 1860.

3099. MICHAEL HENRY, of 84, Fleet Street, in the City of London, Patent Agent, for an invention for—"Improvements applicable to fishing nets."—*A communication to him from abroad by Charles François Lepage, Charles Jacques Pombla, aîné, and Alexis Seguineau, of 33, Boulevard Saint Martin, Paris, France.* *Letters Patent sealed.*

TAYLOR.
17th December 1860.

3100. JOHN GEORGE TAYLOR, of Paris, in the Empire of France, Merchant, for an invention for—"Improvements in the manufacture of boots and shoes, and in the method of measuring the human foot for fitting the same." *Letters Patent sealed.*

WALKER.
17th December 1860.

3101. THOMAS WEST WALKER, of Poole, in the County of Dorset, Manager, for an invention for—"Improvements in the manufacture of ornamental bricks, tiles, and other articles of a similar nature, and in the machinery or apparatus employed therein." *Letters Patent sealed.*

MOREL.
17th December 1860.

3102. ERNEST LEON MOREL, of Paris, in the Empire of France, Gentleman, for an invention for—"Improvements in ships' rudders and the mode of mounting or applying the same to the stern posts of vessels." *Provisional protection only.*

SILAS.
18th December 1860.

3103. FERDINAND SILAS, of No. 4, Leicester Place, Leicester Square, in the County of Middlesex, Gentleman, for an invention for—"An aërostatic signal apparatus to be called sema-sphere." *Provisional protection only.*

STEVENS.
18th December 1860.

3104. CHARLES STEVENS, Manager of the British and Foreign Office for Patents, 1B, Welbeck Street, Cavendish Square, in the County of Middlesex, for an invention for—"A new mode of obtaining an article resembling honey and to be used as a substitute therefor."—*A communication to him from abroad by François Vachon, of 42, Rue Laffitte, Paris, in the Empire of France.* *Letters Patent sealed.*

STEVENS.
18th December 1860.

3105. CHARLES STEVENS, Manager of the British and Foreign Office for Patents, 1B, Welbeck Street, Cavendish Square, in the County of Middlesex, for an invention for—"An improved cooking stove."—*A communication to him from abroad by Mr. Zimmermann, of 42, Rue Laffitte, Paris, in the Empire of France.* *Complete specification; Letters Patent sealed.*

PRESTON.
LLOYD.
18th December 1860.

3106. THOMAS LOVELL PRESTON, of Birmingham, in the County of Warwick, Machinist, and THOMAS LLOYD, of Birmingham, aforesaid, Brassfounder, for an invention for—"Improvements in the manufacture of metallic bedsteads, chairs, and couches, and other articles of like manufacture." *Letters Patent sealed.*

MAC ARTHUR.
18th December 1860.

3107. RICHARD WAUGH MAC ARTHUR, formerly of Melbourne, Victoria, Merchant, but now of 38, Chapel Street, Belgrave Square, London, for an invention for—"Hulling and dressing rice and other grain."—*A communication to him from abroad by Thomas Sutherland, of Melbourne, Victoria, Millowner.* *Letters Patent sealed.*

SCHOLES.
18th December 1860.

3108. WILLIAM SCHOLES, of High Town, near Leeds, in the County of York, Card Maker, for an invention for—"Improvements in wire card-covering for carding wool, silk, flax, tow, cotton, jute or other fibrous substances." *Letters Patent sealed.*

BROOMAN.
18th December 1860.

3109. RICHARD ARCHIBALD BROOMAN, of 166, Fleet Street, in the City of London, Patent Agent, for an invention for—"Improvements in shears for cutting sheet metal and other materials."—*A communication to him from abroad by Jean Momet, of Paris.* *Letters Patent sealed.*

HANCOCK.
18th December 1860.

3110. CHARLES LAMB HANCOCK, of Pentonville, in the County of Middlesex, Manufacturer, for an invention for—"An improved fuel." *Provisional protection only.*

PATERSON.
18th December 1860.

3111. JOHN PATERSON, of Wood Street, in the City of London, Manufacturer, for an invention for—"An improved neck tie." *Provisional protection only.*

CHESTERMAN.
18th December 1860.

3112. JAMES CHESTERMAN, of Sheffield, in the County of York, Manufacturer, for an invention for—"Improvements in door and gate springs, hinges and centres, the improved springs being applicable to other purposes for which springs are employed." *Letters Patent sealed.*

JOHNSON.
18th December 1860.

3113. JOHN HENRY JOHNSON, of 47, Lincoln's Inn Fields, in the County of Middlesex, and of 166, Buchanan Street, in the City of Glasgow, North Britain, Gentleman, for an invention for—"An improved compound felted and textile fabric."—*A communication to him from abroad by Messieurs Imbs Brothers and Company, of Paris, in the Empire of France.* *Letters Patent sealed.*

SPENCE.
19th December 1860.

3114. WILLIAM SPENCE, of 50, Chancery Lane, in the County of Middlesex, Patent Agent, for an invention for—"Improvements in apparatus for closing doors and keeping them closed."—*A communication to him from abroad by Robert B. Donaldson, of Washington, in the District of Columbia, in the United States of America.* *Provisional protection only.*

McGAULEY.
19th December 1860.

3115. JAMES WILLIAM McGAULEY, of Pimlico, in the County of Middlesex, Gentleman, for an invention for—"Improvements in means or apparatus for preventing collisions on railways." *Provisional protection only.*

COLE.
COLE.
19th December 1860.

3116. RICHARD JOHN COLE, and MARY SCARVELL COLE, both of Pembridge Gardens, Bayswater, in the County of Middlesex, for an invention for—"Improvements in ornamenting or illuminating glass for decorative purposes." *Letters Patent sealed.*

BLAKE.
19th December 1860.

3117. OBED BLAKE, of Southampton Street, Strand, in the County of Middlesex, Plate Glass Manufacturer, for an invention for—"Improvements in the manufacture of that description of glass termed plate glass." *Letters Patent sealed.*

BRINKLEY.
19th December 1860.

3118. JOHN BRINKLEY, of Carrickfergus, in the County of Antrim, Manufacturer, for an invention for—"Improvements in furnaces for consuming or preventing the emission of smoke." *Provisional protection only.*

HENRY.
19th December 1860.

3119. MICHAEL HENRY, of 84, Fleet Street, in the City of London, Patent Agent, for an invention for—"Improvements in the manufacture of colours applicable for various uses in arts and manufactures."—*A communication to him from abroad by Bénoit Marie Alexandre Glénard, and the Société Coignet, père, fils et C , of 33, Boulevard St. Martin, Paris, France.* *Provisional protection only.*

BROOMAN.
19th December 1860.

3120. RICHARD ARCHIBALD BROOMAN, of 166, Fleet Street, in the City of London, Patent Agent, for an invention for—"An improvement in irons for ironing."—*A communication to him from abroad by Joachim Etienne Daniel Fossard, of Paris.* *Letters Patent sealed.*

BROOMAN.
19th December 1860.

3121. RICHARD ARCHIBALD BROOMAN, of 166, Fleet Street, in the City of London, Patent Agent, for an invention for—"Improvements in the treatment of caoutchouc, and the employment of a product obtained thereby for lubricating and coating bodies."—*A communication to him from abroad by J. D. Duhousset, and P. E. Thomas, both of Paris.* *Letters Patent sealed.*

GILMORE.
19th December 1860.

3122. JOHN GILMORE, of Ramsgate, in the County of Kent, Clerk, for an invention for—"An improved method of raising water in baths." *Provisional protection only.*

ROBINSON.
ROBINSON.
19th December 1860.

3123. CHARLES WILLIAM ROBINSON, and JOSEPH ROBINSON, Junior, of Mount Kennett, in the City of the County of Limerick, Ireland, for an invention for—"The singeing of the hairs off pigs after being killed without letting the flames or smoke from the fires come in direct contact with the pig." *Provisional protection only.*

MOSSMAN.
20th December 1860.

3124. WILLIAM MOSSMAN, of No. 1, Cleveland Terrace, Downham Road, in the Parish of St. Mary's, Islington, London, in the County of Middlesex, Manufacturing Stationer, for an invention for—"The manufacture of bonnets from papered cloth." *Letters Patent sealed.*

FOURNIER. 20th December 1860.

3125. AMÈDIE BENOIT FOURNIER, of 46, King Street, Soho, in the County of Middlesex, Engineer, for an invention for—"Preventing accidents on railways."
Provisional protection NOT granted.

WEST. 20th December 1860.

3126. JOHN WEST, of Kingstown, near Dublin, for an invention for—"Improvements in apparatus for drying grain."—*A communication to him from abroad by John Joseph West, of Mendota, Illinois, United States of America.*
Provisional protection only.

CLARKE. 20th December 1860.

3127. JAMES CLARKE, the younger, of Longford Street, Rochdale, in the County of Lancaster, for an invention for—"Improvements in warping."
Provisional protection only.

SYKES. SYKES. 20th December 1860.

3128. THOMAS SYKES, Manufacturing Chemist and Oil Merchant, and BENJAMIN CLIFFORD SYKES, Doctor of Medicine, both of Cleckheaton, in the Parish of Birstal, in the County of York, for an invention for—"Improvements in furnaces."
Letters Patent sealed.

HADFIELD. 20th December 1860.

3129. GEORGE HADFIELD, of Carlisle, in the County of Cumberland, Varnish Manufacturer, for an invention for—"Improvements in the preparation of wood for conversion into casks or barrels, and in machinery to be used for that purpose."
Letters Patent sealed.

SCHWANN. 20th December 1860.

3130. FREDERICK SCHWANN, of Gresham Street, in the City of London, for an invention for—"Improvements in dressing and stiffening fabrics and yarns, and in preparing the cementing and stiffening materials used." *Letters Patent sealed.*

BAKER. 20th December 1860.

3131. FRANCIS BRYAN BAKER, of Sherwood Street, Nottingham, for an invention for—"Improvements in the manufacture of lace." *Letters Patent sealed.*

RENNIE. 20th December 1860.

3132. GEORGE BANKS RENNIE, of the firm of George Rennie and Sons, Holland Street, Blackfriars, Civil Engineer, for an invention for—"Improvements in machinery, apparatus and works of construction intended to be employed and the mode or method of using or employing the same for the purpose of examining or repairing ships and other vessels." *Letters Patent sealed.*

WHITEHALL. 20th December 1860.

3133. EDWARD WHITEHALL, of the Town and County of the Town of Nottingham, Mechanist, for an invention for—"Improvements in machinery for embroidering on lace and other fabrics." *Letters Patent sealed.*

SOUTHAM. 20th December 1860.

3134. EDWARD SOUTHAM, of the City of Manchester, Officer of Taxes, for an invention for—"Improvements in machinery and apparatus for retarding and stopping railway trains." *Provisional protection only.*

PRICE. 21st December 1860.

3135. WILLIAM PRICE, of No. 4, Wood Street, in the Parish of Lambeth, in the County of Surrey, Carpenter, for an invention for—"Improvements in the manufacture of articles called shives, tits, bungs and corks, or other conical bodies whether made out of wood, cork, or any other substance." *Provisional protection only.*

MORRIS. 21st December 1860.

3136. DAVID ALEXANDER MORRIS, of Pittsburgh, Pennsylvania, in the United States of America, for an invention for—"Improvements in the manufacture of sheet-iron." *Letters Patent sealed.*

LOVERIDGE. 21st December 1860.

3137. HENRY LOVERIDGE, of Wolverhampton, for an invention for—"Improvements in meat screens." *Letters Patent sealed.*

CHATTERTON. SMITH. 21st December 1860.

3138. JOHN CHATTERTON, of Highbury Terrace, and WILLOUGHBY SMITH, of Pownall Road, Dalston, both in the County of Middlesex, for an invention for—"Improvements in the manufacture of electric telegraph cables."
Letters Patent sealed.

MOORE. 21st December 1860.

3139. THOMAS MOORE, of No. 33, Regent Circus, Piccadilly, in the County of Middlesex, for an invention for—"Improvements in navigating ships."
Letters Patent sealed.

RIGBY. NEEDHAM. 21st December 1860.

3140. JOHN RIGBY, of Suffolk Street, in the City of Dublin, and JOSEPH NEEDHAM, of Piccadilly, in the County of Middlesex, Gun Makers, for an invention for—"Improvements in breech loading fire-arms and cartridges." *Letters Patent sealed.*

HUNT. 21st December 1860.

3141. THOMAS HUNT, of Crewe, in the County of Chester, Engineer, for an invention for—"Improvements in apparatus for supplying steam generators with water."
Letters Patent sealed.

JOHNSON.
21st December 1860.

3142. JOHN HENRY JOHNSON, of 47, Lincoln's Inn Fields, in the County of Middlesex, and of 166, Buchanan Street, in the City of Glasgow, North Britain, Gentleman, for an invention for—"Improvements in magneto-electric machines."—*A communication to him from abroad by Hypolite Worms, of Paris, in the Empire of France, Banker.* *Provisional protection only.*

GLOVER.
21st December 1860.

3143. JAMES GLOVER, of Danes Inn, Strand, in the County of Middlesex, Gentleman, for an invention for—"Improvements in mounting and affixing opaque letters or numerals on a translucent ground." *Provisional protection only.*

PETERS.
22nd December 1860.

3144. CHARLES PETERS, of the City of Coventry, Ribbon Manufacturer, for an invention for—"Improvements in looms used in the manufacture of ribbons and other fabrics." *Provisional protection only.*

JOHNSTON.
22d December 1860.

3145. JAMES JOHNSTON, of No. 1, Pond Street, Hampstead, in the County of Middlesex, Gentleman, for an invention for—"Improvements in apparatus for withdrawing corks from bottles." *Provisional protection only.*

COOK.
STOKES.
22nd December 1860.

3146. EDWARD COOK, of Birmingham, in the County of Warwick, Bedstead Manufacturer, and JAMES STOKES, of the same place, Mechanic, for an invention for—"Improvements in sacking and joints for bedsteads." *Letters Patent sealed.*

HUGHES.
22nd December 1860.

3147. HENRY HUGHES, Engineer of "Falcon Works," Loughborough, in the County of Leicester, for an invention for—"An improved method of making wheels for carts, waggons, and carriages for common roads and rail ways." *Provisional protection only.*

SANDYS.
22nd December 1860.

3148. GEORGE SANDYS, of Aldersgate-Street, Electric-Engineer, for an invention for—"A novel instrument or apparatus for conveying signals or communicating intelligence between railway stations and other distant points." *Letters Patent sealed.*

MARSHALL.
22nd December 1860.

3149. THOMAS BEAUMONT MARSHALL, of the firm of George Trimby & Co., of 41, Queen Street, Cheapside, in the City of London, Musical Instrument Manufacturers, for an invention for—"Improvements in wind musical instruments." *Letters Patent sealed.*

CLARK.
22nd December 1860.

3150. WILLIAM CLARK, of 53, Chancery Lane, in the County of Middlesex, Engineer and Patent Agent, for an invention for—"Improvements in the manufacture of coloring matters."—*A communication to him from abroad by Charles Emile Kopp, of 29, Boulevart St. Martin, Paris, in the Empire of France, formerly Professor of Chemistry.* *Letters Patent sealed.*

SAVAGE.
22nd December 1860.

3151. ALFRED SAVAGE, of Nos. 42 and 43, Eastcheap, in the City of London, Machinist, for an invention for—"Improved apparatus for separating, reducing in size and mixing articles of grocery." *Letters Patent sealed.*

NEWTON.
22nd December 1860.

3152. ALFRED VINCENT NEWTON, of the Office for Patents, 66, Chancery Lane, in the County of Middlesex, Mechanical Draughtsman, for an invention for—"Improvements in watches."—*A communication to him from abroad by A. L. Dennison, of Waltham, County of Middlesex, and State of Massachusetts, United States of America.* *Letters Patent sealed.*

GIBBONS.
24th December 1860.

3153. WILLIAM JOHN GIBBONS, of Birmingham, in the County of Warwick, Manufacturer, for an invention for—"Improvements in stereoscopes and their cases." *Complete specification; protection for SIX months only.*

SPENCE.
24th December 1860.

3154. PETER SPENCE, of Newton Heath, near Manchester, in the County of Lancaster, Manufacturing Chemist, for an invention for—"Improvements in separating copper from its ores." *Provisional protection only.*

ADAMES.
WHITEHOUSE.
24th December 1860.

3155. CHARLES HENRY ADAMES, of Birmingham, in the County of Warwick, Frying Pan Manufacturer, and CORNELIUS WHITEHOUSE, of Wolverhampton, in the County of Stafford, Engineer, for an invention for—"A new or improved mode of manufacturing frying pans and other articles produced from sheet iron or other metals." *Letters Patent sealed.*

NEWTON.
24th December 1860.

3156. WILLIAM EDWARD NEWTON, of the Office for Patents, 66, Chancery Lane, in the County of Middlesex, Civil Engineer, for an invention for—"An improved archer's bow and bow gun toy."—*A communication to him from abroad by William Henry Stevens, and Benjamin Rigal Norton, both of the City of New York.* *Provisional protection only.*

FANSHAWE. JAQUES. 24th December 1860.

3157. JOHN AMERCIUS FANSHAWE, o Tottenham, in the County of Middlesex, Engineer, and JAMES ARCHIBALD JAQUES, of the same place, Chemist, for an invention for—"Improvements in the manufacture of fabrics with rubbing or friction surfaces." *Letters Patent sealed.*

NORTON. 24th December 1860.

3158. JAMES LEE NORTON, of 38, Belle Sauvage Yard, Ludgate Hill, in the City of London, for an invention for—"Improvements in apparatus for drying wool and other fibres." *Letters Patent sealed.*

NORTON. 24th December 1860.

3159. JAMES LEE NORTON, of 38, Belle Sauvage Yard, Ludgate Hill, in the City of London, for an invention for—"Improvements in apparatus for drying wheat, barley, and other grain and seeds." *Letters Patent sealed.*

WARREN. 26th December 1860.

3160. FREDERICK WARREN, of Birmingham, Mechanical Engineer, for an invention for—"Improvements in the machine used for cleaning cotton and commonly calld 'a churka' or 'roller gin.'" *Provisional protection only.*

PULS. 26th December 1860.

3161. FRANCIS PULS, of No. 25, Francis Terrace, Hackney Wick, in the County of Middlesex, Chemist, for an invention for—"Improvements in obtaining products from coal, gas tar, gas pitch, coal tar, asphalte, resin, and other bituminous and resinous substances." *Letters Patent sealed.*

LIZARS. 26th December 1860.

3162. CHARLES LIZARS, of No. 36, Rue Lafayette, in Paris, Manufacturer of gas meters, for an invention for—"Improvements in gas meters." *Letters Patent sealed.*

DESBOROUGH. MIDDLETON. 26th December 1860.

3163. SPENDLOVE DESBOROUGH, of Noble Street, in the City of London, Commission Agent, and SAMUEL MIDDLETON, of Essex Street, Strand, in the County of Middlesex, Cordwainer, for an invention for—"Improvements in the manufacture of boots and shoes, and in the means and apparatus employed for uniting and preparing surfaces of leather and similar materials for this and other purposes." *Letters Patent sealed.*

JOHNSON. 26th December 1860.

3164. JOHN HENRY JOHNSON, of 47, Lincoln's Inn Fields, in the County of Middlesex, and of 166, Buchanan Street, in the City of Glasgow, North Britain, Gentleman, for an invention for—"Improvements in instruments for assisting the sense of hearing."—*A communication to him from abroad by Charles Grafton Page, of Washington, in the District of Columbia, in the United States of America.* *Letters Patent sealed.*

JOHNSON. 26th December 1860.

3165. JOHN HENRY JOHNSON, of 47, Lincoln's Inn Fields, in the County of Middlesex, and of 166, Buchanan Street, in the City of Glasgow, North Britain, Gentleman, for an invention for—"Improvements in smoothing irons."—*A communication to him from abroad by Antoine Jules Alfred Cavelier de Mocomble, of Paris, in the Empire of France.* *Letters Patent sealed.*

DARBY. 27th December 1860.

3166. WILLIAM DARBY, of Birmingham, in the County of Warwick, Engineer, for an invention for—"Improvements in constructing and working stamps for cutting and shaping metals." *Provisional protection only.*

SAGE. 27th December 1860.

3167. FREDERICK SAGE, Builder, No. 11, Hatton Garden, St. Andrew's, Middlesex, for an invention for—"Improvements in brackets for carrying trays, shelves glass cases, &c., in windows and glass cases." *Provisional protection only.*

PARRY. 27th December 1860.

3168. WILLIAM PARRY, of High Street, Deptford, in the County of Kent, Potter, for an invention for—"Improvements in the manufacture of chimney pots, pedestals and such like articles made from clay or plastic materials, and machinery for that purpose." *Letters Patent sealed.*

STONE. 27th December 1860.

3169. JOHN TAYLOR GURNEY STONE, of Gopsall Street, Hoxton, in the County of Middlesex, for an invention for—"An improved method of covering steel used for ladies' crinolines and other articles of dress." *Provisional protection only.*

BROOMAN. 27th December 1860.

3170. RICHARD ARCHIBALD BROOMAN, of 166, Fleet Street, in the City of London, Patent Agent, for an invention for—"Improvements in axle boxes and in naves of wheels."—*A communication to him from abroad by Pierre Joseph Bertrand, of Saint Paul lez-Dax, France.* *Provisional protection only.*

GUERRÉE. 27th December 1860.

3171. TOUSSAINT VICTOR GUERRÉE, of L'aigle, Town in the French Empire, Mechanic, for an invention for—"An apparatus for moving waggons or carriages on railways." *Provisional protection only.*

HILL.
BARBER.
27th December 1860.

3172. WILLIAM HILL, of 103, Milton Street, Sheffield, in the County of York, Ivory Turner, and HENRY BARBER, of 60, Thomas Street, Sheffield, aforesaid, Spring Knife Cutler, for an invention for—"An improvement in the manufacture of spring knife scales and knife handles." *Letters Patent sealed.*

PARNALL.
PARNALL.
27th December 1860.

3173. ROBERT PARNALL, and HENRY PARNALL, of Bishopsgate Street Without, in the County of Middlesex, Clothiers, for an invention for—"Improvements in means for promoting warmth and comfort in railway and other travelling." *Letters Patent sealed.*

MULLEY.
27th December 1860.

3174. WILLIAM ROBINSON MULLEY, of 10, Lockyer Street, Plymouth, for an invention for—"Improvements in apparatus for steering ships or vessels." *Letters Patent sealed.*

DODMAN.
BELLHOUSE.
27th December 1860.

3175. GEORGE DODMAN, of Rochdale, in the County of Lancaster, Mechanic, and WILLIAM BELLHOUSE, of the same place, Shopkeeper, for an invention for—"Improvements in hoists." *Letters Patent sealed.*

NEWTON.
27th December 1860.

3176. ALFRED VINCENT NEWTON, of the Office for Patents, 66, Chancery Lane, in the County of Middlesex, Mechanical Draughtsman, for an invention for—"An improvement in the construction of bedsteads."—*A communication to him from abroad by Tyler Howe, of Cambridge Port, Massachusetts, in the United States of America.* *Letters Patent sealed.*

BIRKBECK.
28th December 1860.

3177. GEORGE HENRY BIRKBECK, of the firm of Tongue & Birkbeck, of 34, Southampton Buildings, Chancery Lane, in the County of Middlesex, Patent Agents and Engineers, for an invention for—"Improvements in furnaces for consuming smoke."—*A communication to him from abroad by François Jules Chéry, Captain in the Corps of Imperial Engineers, of Paris.* *Provisional protection only.*

TAIT.
28th December 1860.

3178. JAMES TAIT, of Southwark, in the County of Surrey, for an invention for—"Improvements in certain articles of dress." *Provisional protection NOT granted.*

BINKS.
28th December 1860.

3179. CHRISTOPHER BINKS, of Parliament Street, Westminster, for an invention for—"Improvements in manufacturing certain gases applicable in generating heat and light, and in bleaching." *Provisional protection only.*

DIMOCK.
28th December 1860.

3180. IRA DIMOCK, Machinist, of Florence, Hampshire County, State of Massachusetts, United States of North America, temporarily residing at the City of Manchester, in the County of Lancaster, for an invention for—"Improvements in machinery for cleaning, sorting according to size, and doubling silk and other threads."—*The result partly of a communication from abroad made to him by Goodrich Holland, of Windham, County of Windham, and State of Connecticut, and partly his own invention and discovery.* *Letters Patent sealed.*

PALLU.
28th December 1860.

3181. CLAUDE PALLU, of Nogent sur Marne, near Paris, in the Empire of France, for an invention for—"Improvements in apparatuses and process for producing photographic pictures without working in dark rooms." *Provisional protection only.*

NEWTON.
28th December 1860.

3182. WILLIAM EDWARD NEWTON, of the Office for Patents, 66, Chancery Lane, in the County of Middlesex, Civil Engineer, for an invention for—"Improved machinery to be used in the manufacture of paper."—*A communication to him from abroad by Mr. Heinrich Voelter, of Heidenheim, in the Kingdom of Wurtemberg.* *Letters Patent sealed.*

NEWTON.
28th December 1860.

3183. ALFRED VINCENT NEWTON, of the Office for Patents, 66, Chancery Lane, in the County of Middlesex, Mechanical Draughtsman, for an invention for—"An improvement in breech-loading fire-arms."—*A communication to him from abroad by Mahlon J. Gallagher, of Philadelphia, in the United States of America.* *Letters Patent sealed.*

RUSSELL.
28th December 1860.

3184. JOHN SCOTT RUSSELL, of Great George Street, Westminster, for an invention for—"Improvements in constructing and arming ships and vessels, and also floating and land batteries." *Letters Patent sealed.*

BRINTON.
LEWIS.
29th December 1860.

3185. JOHN BRINTON, and JOHN LEWIS, of Kidderminster, in the County of Worcester, Carpet Manufacturers, for an invention for—"Improvements in the manufacture of pile carpets, rugs and other pile fabrics." *Letters Patent sealed.*

CLARK.
29th December 1860.

3186. WILLIAM CLARK, of 53, Chancery Lane, in the County of Middlesex, Engineer and Patent Agent, for an invention for—"An improved tissue fabric or structure."—*A communication to him from abroad by Mr. Michel Antoine Graziani, Engineer, of 29, Boulevart St. Martin, Paris, in the Empire of France.*

Letters Patent sealed.

BURNHAM.
29th December 1860.

3187. EGBERT REUBEN BURNHAM, of Liverpool, in the County of Lancaster, India-rubber Manufacturer, for an invention for—"Improvements in apparatus or machinery for stamping, shaping or forming certain kinds of goods manufactured of india-rubber, gutta-percha and like substances." *Letters Patent sealed.*

ST. CYR.
GRIGNON.
ROME.
29th December 1860.

3188. JEAN LAFON ST. CYR, AUGUSTE JOSEPH GRIGNON, and PHILIPPE ROME, all of Paris, France, Gentlemen, for an invention for—"Improvements in manufacturing fibrous materials, tissues or other fabrics."

Provisional protection only.

VINER.
29th December 1860.

3189. HENRY WILLIAM VINER, of Penzance, in the County of Cornwall, Professor of Music, for an invention for—"Improvements in grand pianofortes."

Letters Patent sealed.

VILCOQ.
29th December 1860.

3190. LAURENT CHARLES MARIE JOSEPH VILCOQ, of Courbevoie, in the Department of the Seine, France, Householder, for an invention for—"Improvements in apparatus or machinery for triturating textile bodies and other substances."

Letters Patent sealed.

DAVIES.
29th December 1860.

3191. GEORGE DAVIES, of No. 1, Serle Street, Lincoln's Inn, in the County of Middlesex, and No. 28, St. Enoch Square, in the City of Glasgow, Civil Engineer and Patent Agent, for an invention for—"Improvements in printing calicoes and other fabrics."—*A communication to him from abroad by Gabriel Descat, of Paris, France, Dyer and Printer.* *Letters Patent sealed.*

CHAMBERLAIN.
29th December 1860.

3192. HUMPHREY CHAMBERLAIN, of the Sandford Estate Pottery Works, Wareham, Dorsetshire, for an invention for—"Improvements in the preparation of clay for pottery purposes, which improvements are also applicable to filtering or cleansing liquids." *Letters Patent sealed; no specification filed.*

DE BUFFON.
31st December 1860.

3193. BENJAMIN NADAULT DE BUFFON, of Numero 28, Rue des Saints Pères, Paris, in the Empire of France, for an invention for—"Improvements in apparatuses for clarifying and purifying water and other liquids."

Complete specification; Letters Patent sealed.

MIDGLEY.
SUGDEN.
CLAPHAM.
31st December 1860.

3194. JOHN MIDGLEY, JOHN SUGDEN, and WILLIAM CLAPHAM, all of Keighley, in the County of York, for an invention for—"Improvements in trombones."

Provisional protection only.

EADES.
31st December 1860.

3195. WILLIAM EADES, Machinist and General Tool Manufacturer, of Birmingham, in the County of Warwick, for an invention for—"An improved screw-wrench."

Provisional protection only.

CLISSOLD.
31st December 1860.

3196. WILLIAM CLISSOLD, of Dudbridge, in the County of Gloucester, Engineer, for an invention for—"An improved construction of clutch for driving gear."

Provisional protection only.

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